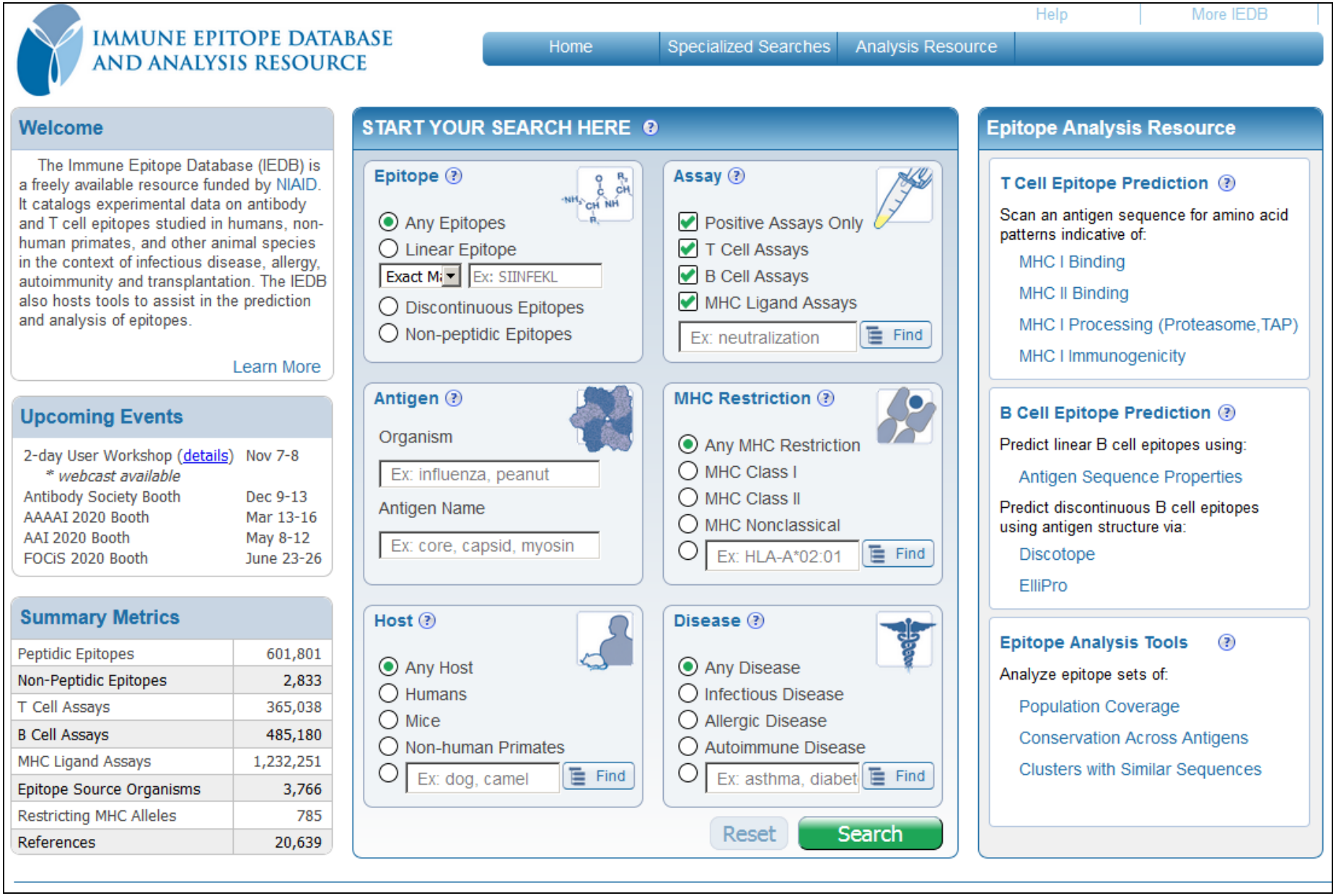
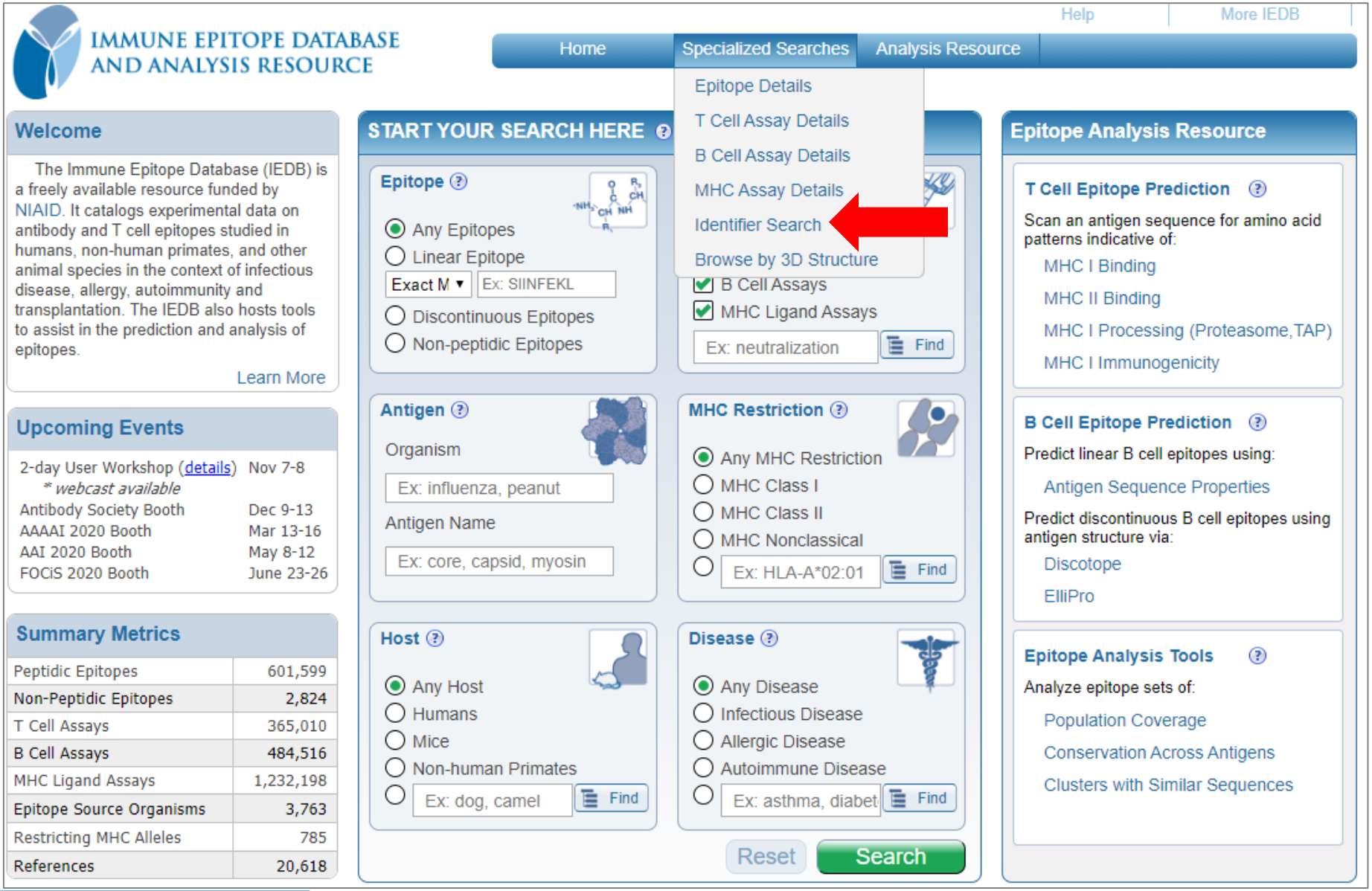
Immune Epitope Database Example Queries

www.iedb.org

Presented by: Nima Salimi, Senior Curator

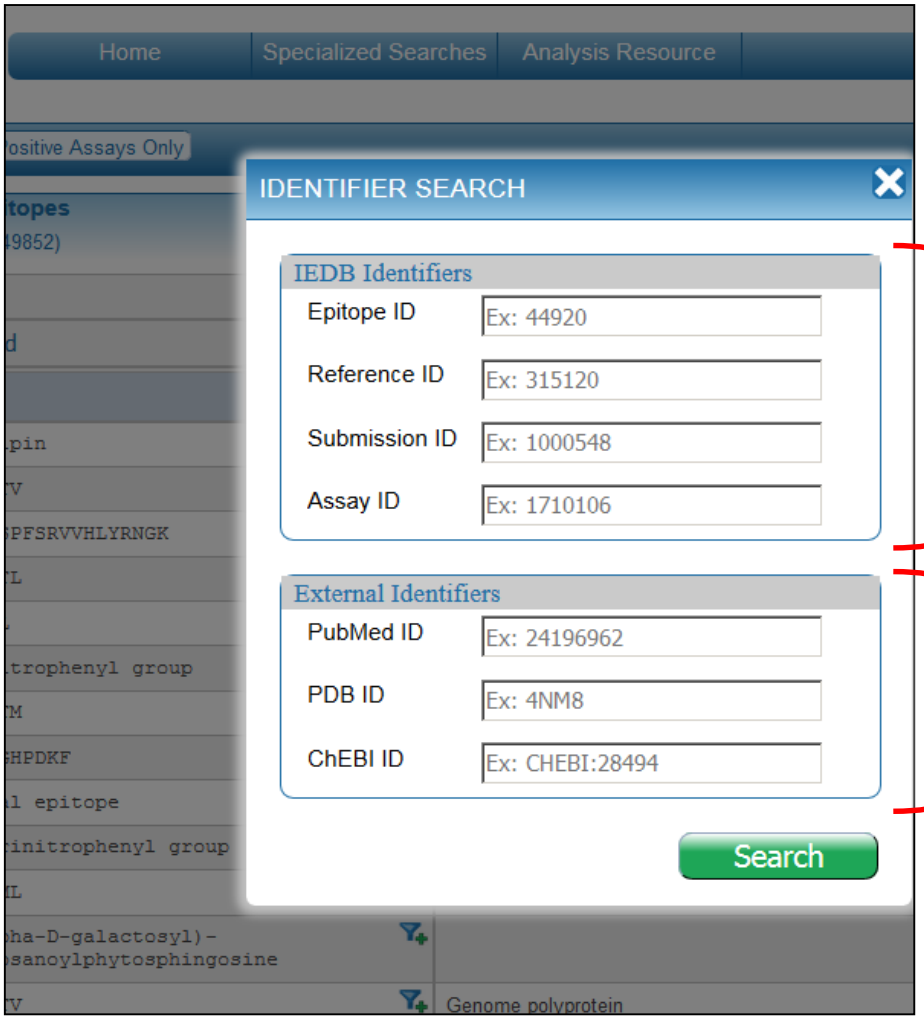

IMMUNE EPITOPE DATABASE AND ANALYSIS RESOURCE
Help
More IEDB
Home
Specialized Searches
Analysis Resource
Welcome
The Immune Epitope Database (IEDB) is a freely available resource funded by NIAID. It catalogs experimental data on antibody and T cell epitopes studied in humans, non-human primates, and other animal species in the context of infectious disease, allergy, autoimmunity and transplantation. The IEDB also hosts tools to assist in the prediction and analysis of epitopes.
Learn More
Upcoming Events
2-day User Workshop (details) Nov 7-8
* webcast available
Antibody Society Booth Dec 9-13
AAAAI 2020 Booth Mar 13-16
AAI 2020 Booth May 8-12
FOCiS 2020 Booth June 23-26
Summary Metrics
Peptidic Epitopes 601,801
Non-Peptidic Epitopes 2,833
T Cell Assays 365,038
B Cell Assays 485,180
MHC Ligand Assays 1,232,251
Epitope Source Organisms 3,766
Restricting MHC Alleles 785
References 20,639
START YOUR SEARCH HERE
Epitope
Any Epitopes
Linear Epitope
Exact M
Ex: SIINFEKL
Discontinuous Epitopes
Non-peptidic Epitopes
Assay
Positive Assays Only
T Cell Assays
B Cell Assays
MHC Ligand Assays
Ex: neutralization
Find
Antigen
Organism
Ex: influenza, peanut
Antigen Name
Ex: core, capsid, myosin
MHC Restriction
Any MHC Restriction
MHC Class I
MHC Class II
MHC Nonclassical
Ex: HLA-A*02:01
Find
Host
Any Host
Humans
Mice
Non-human Primates
Ex: dog, camel
Find
Disease
Any Disease
Infectious Disease
Allergic Disease
Autoimmune Disease
Ex: asthma, diabet
Find
Reset
Search
Epitope Analysis Resource
T Cell Epitope Prediction
Scan an antigen sequence for amino acid patterns indicative of:
MHC I Binding
MHC II Binding
MHC I Processing (Proteasome,TAP)
MHC I Immunogenicity
B Cell Epitope Prediction
Predict linear B cell epitopes using:
Antigen Sequence Properties
Predict discontinuous B cell epitopes using antigen structure via:
Discotope
ElliPro
Epitope Analysis Tools
Analyze epitope sets of:
Population Coverage
Conservation Across Antigens
Clusters with Similar Sequences

Identifier Search



Identifier Search

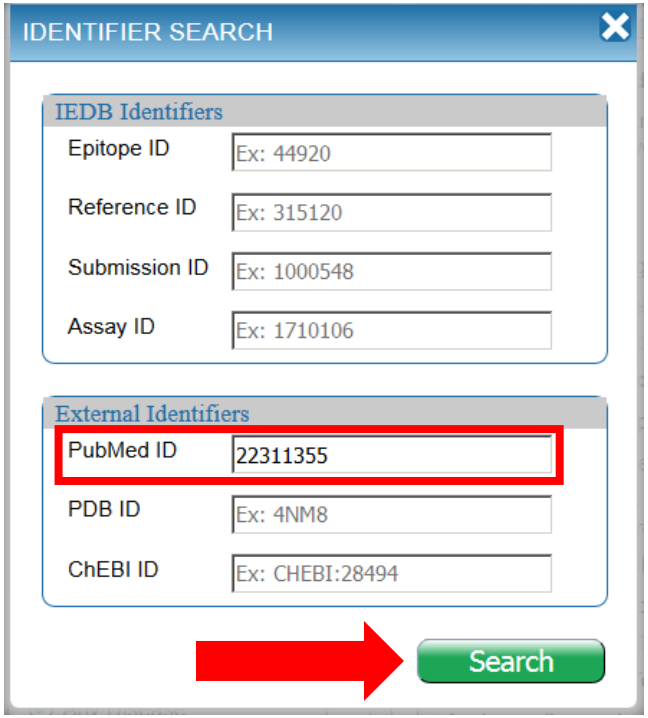
A quick way to retrieve data by using an “inventory number”

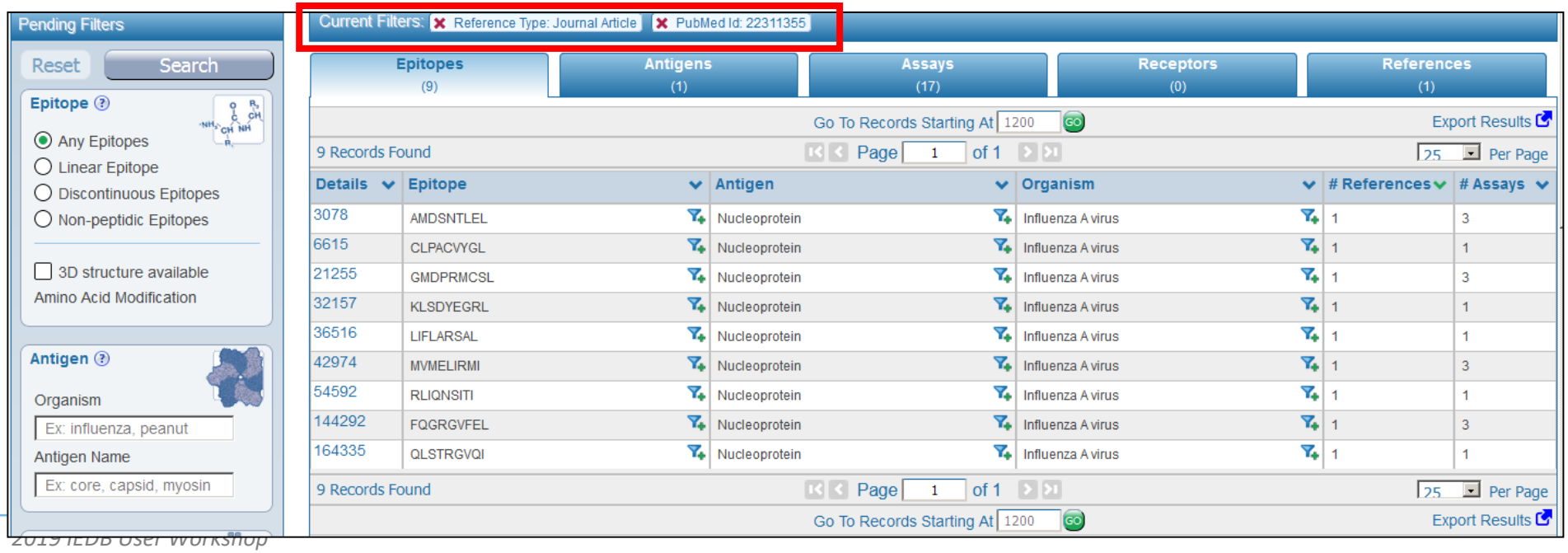


Unique identifiers created by IEDB

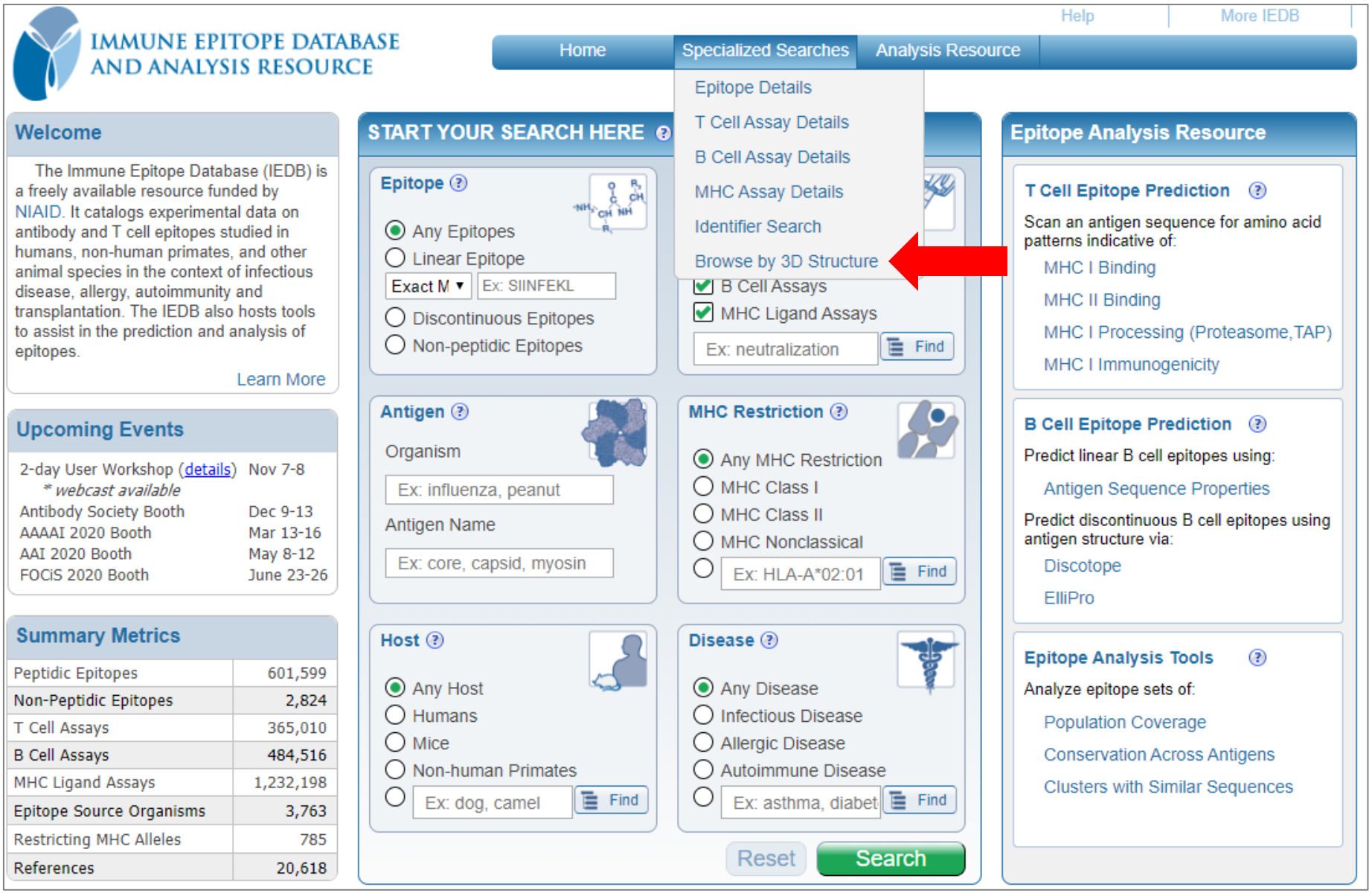
Unique identifiers from other resources

Identifier Search



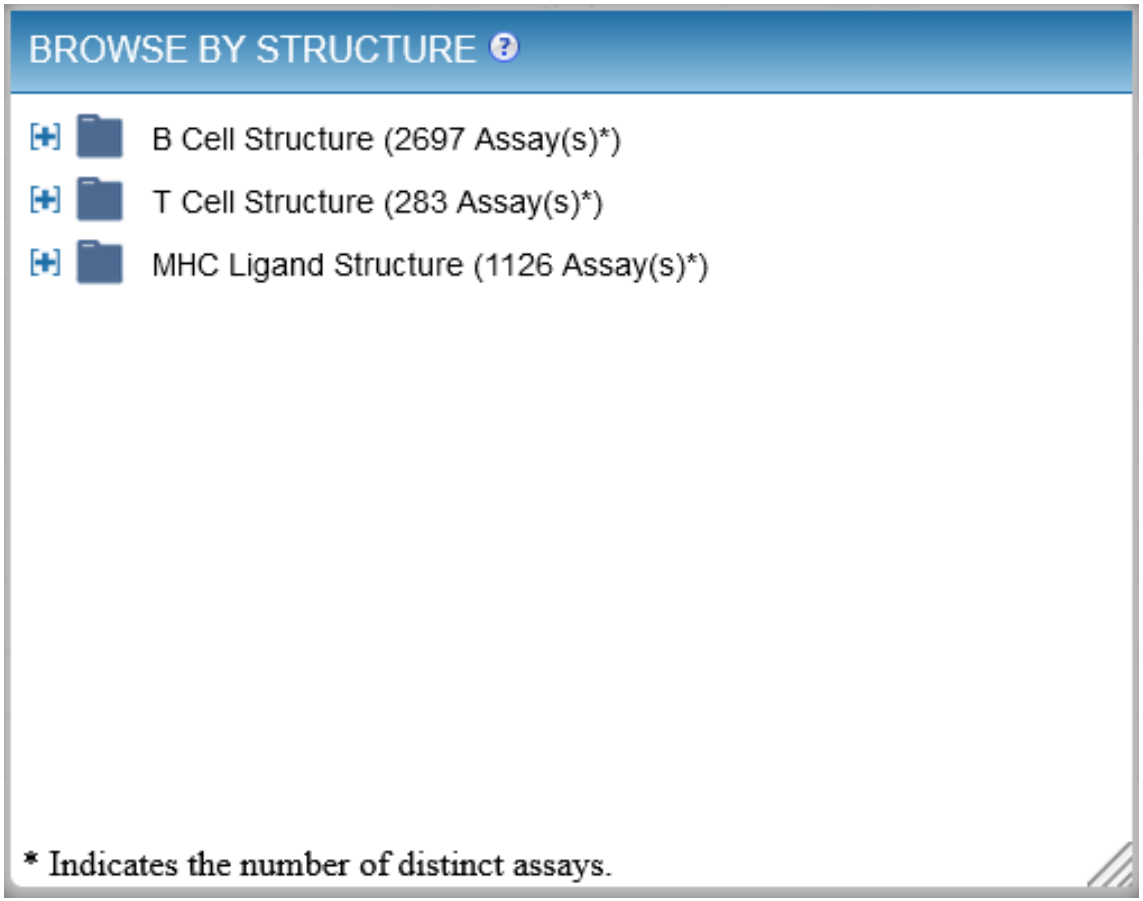


Browse by 3D Structure

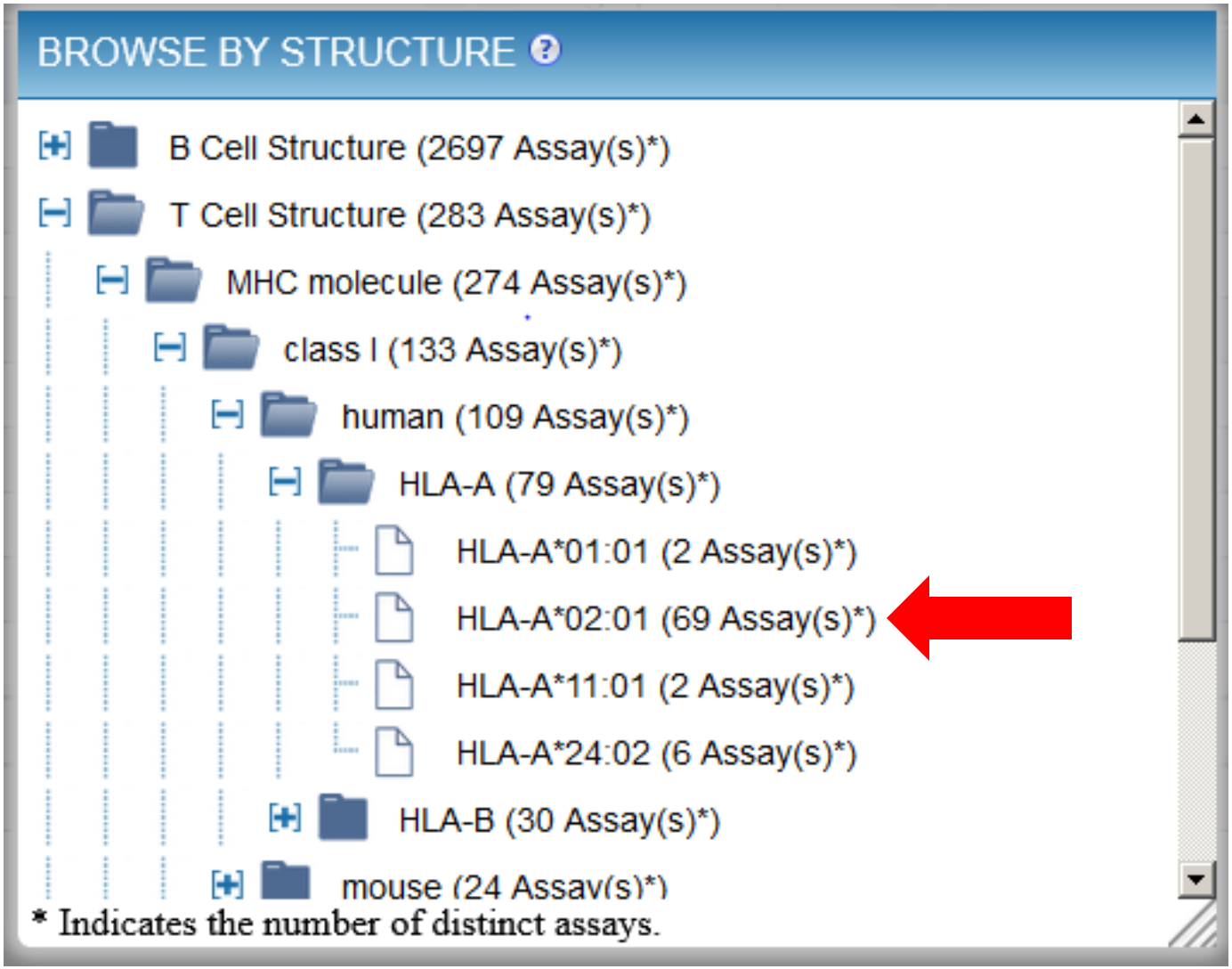


Browse by 3D Structure

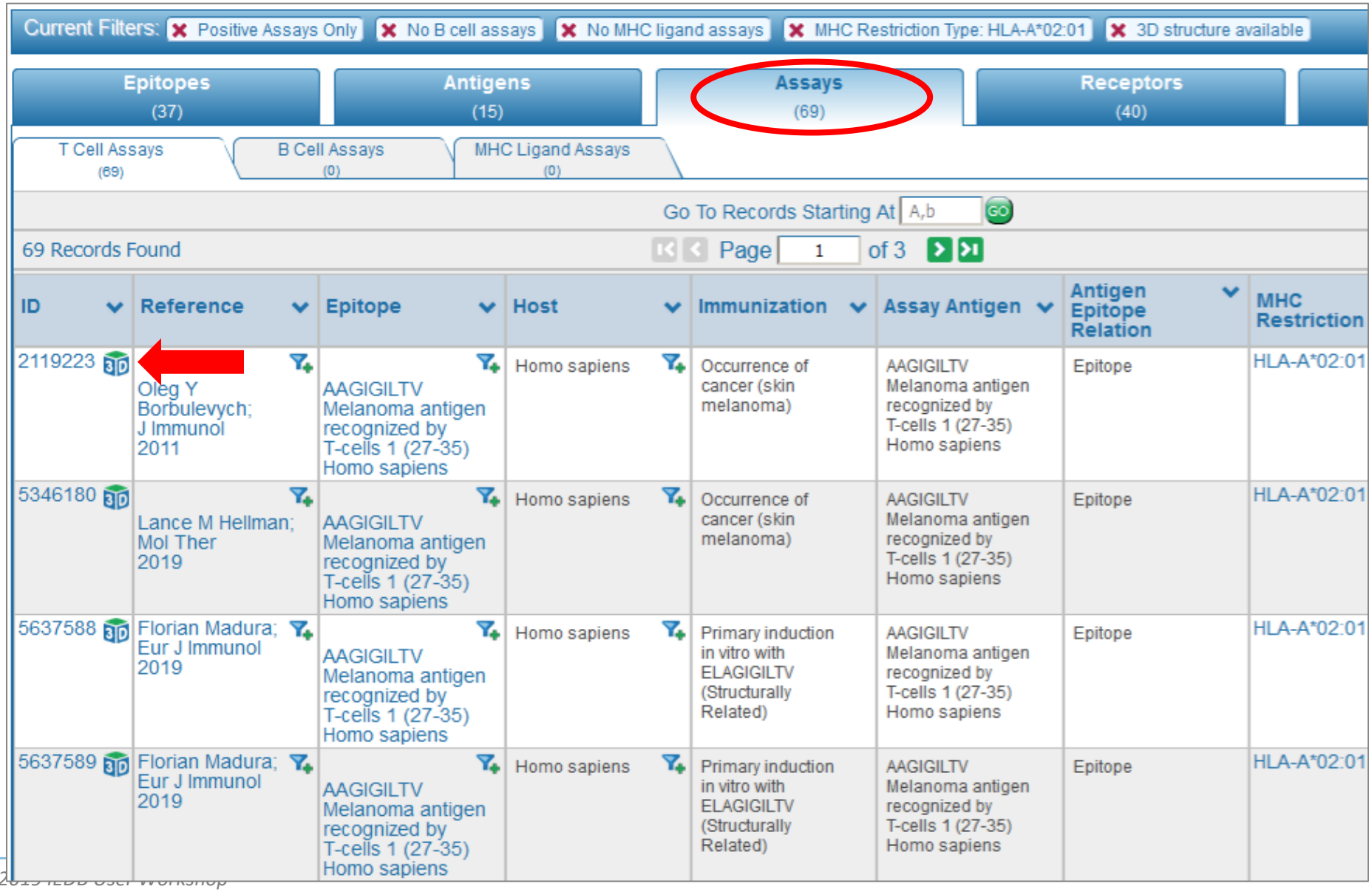
Branches of tree organized by organism that is source of antibody, T Cell, and MHC molecule, respectively.



Browse by 3D Structure



Browse by 3D Structure



Current Filters: Positive Assays Only | No B cell assays | No MHC ligand assays | MHC Restriction Type: HLA-A*02:01 | 3D structure available

Epitopes (37) | Antigens (15) | Assays (69) | Receptors (40)

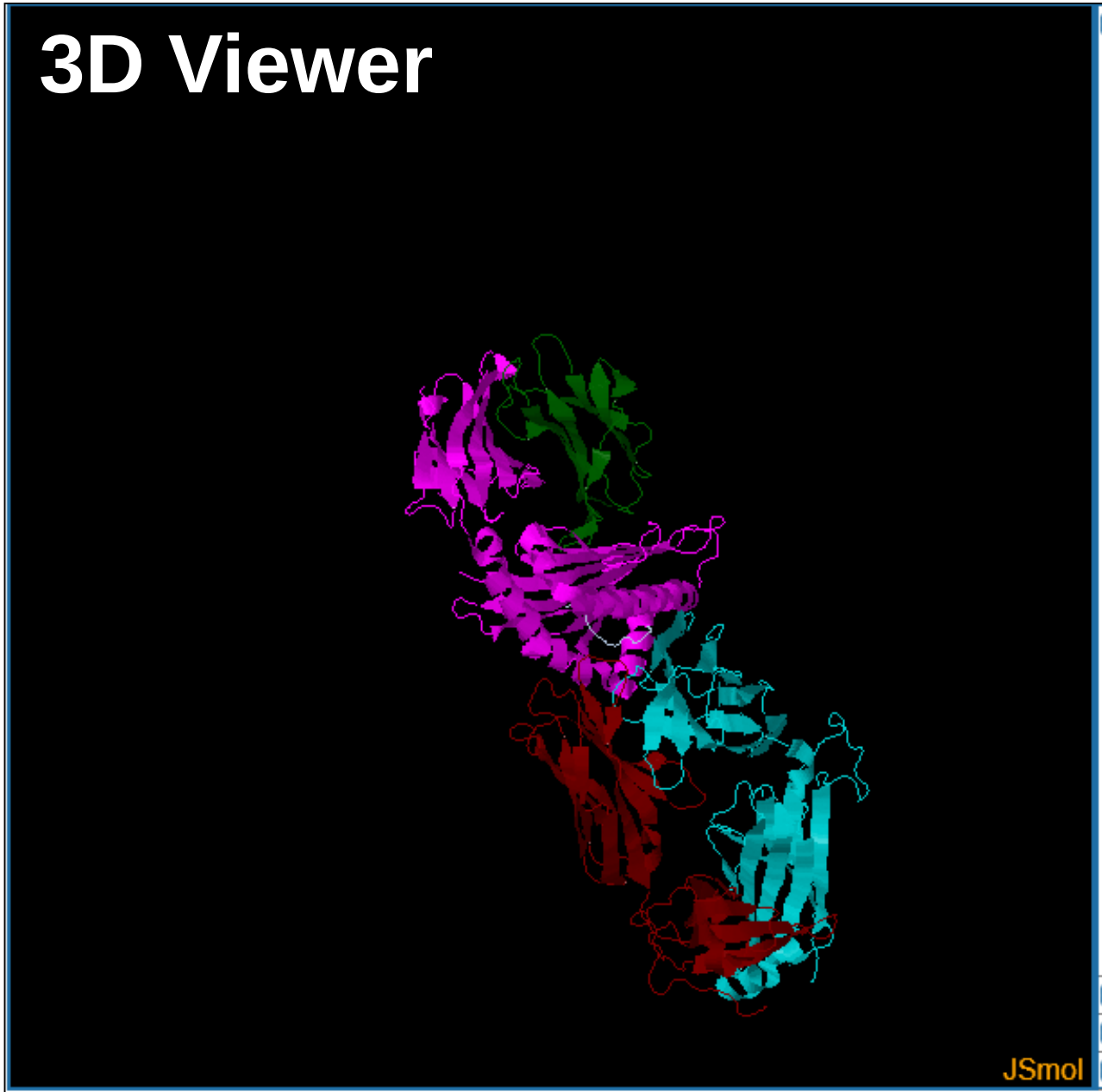
T Cell Assays (69) | B Cell Assays (0) | MHC Ligand Assays (0)

Go To Records Starting At A,b GO

69 Records Found Page 1 of 3

ID	Reference	Epitope	Host	Immunization	Assay Antigen	Antigen Epitope Relation	MHC Restriction
2119223	Oleg Y Borbulevych; J Immunol 2011	AAGIGILTV Melanoma antigen recognized by T-cells 1 (27-35) Homo sapiens	Homo sapiens	Occurrence of cancer (skin melanoma)	AAGIGILTV Melanoma antigen recognized by T-cells 1 (27-35) Homo sapiens	Epitope	HLA-A*02:01
5346180	Lance M Hellman; Mol Ther 2019	AAGIGILTV Melanoma antigen recognized by T-cells 1 (27-35) Homo sapiens	Homo sapiens	Occurrence of cancer (skin melanoma)	AAGIGILTV Melanoma antigen recognized by T-cells 1 (27-35) Homo sapiens	Epitope	HLA-A*02:01
5637588	Florian Madura; Eur J Immunol 2019	AAGIGILTV Melanoma antigen recognized by T-cells 1 (27-35) Homo sapiens	Homo sapiens	Primary induction in vitro with ELAGIGILTV (Structurally Related)	AAGIGILTV Melanoma antigen recognized by T-cells 1 (27-35) Homo sapiens	Epitope	HLA-A*02:01
5637589	Florian Madura; Eur J Immunol 2019	AAGIGILTV Melanoma antigen recognized by T-cells 1 (27-35) Homo sapiens	Homo sapiens	Primary induction in vitro with ELAGIGILTV (Structurally Related)	AAGIGILTV Melanoma antigen recognized by T-cells 1 (27-35) Homo sapiens	Epitope	HLA-A*02:01

3D Viewer

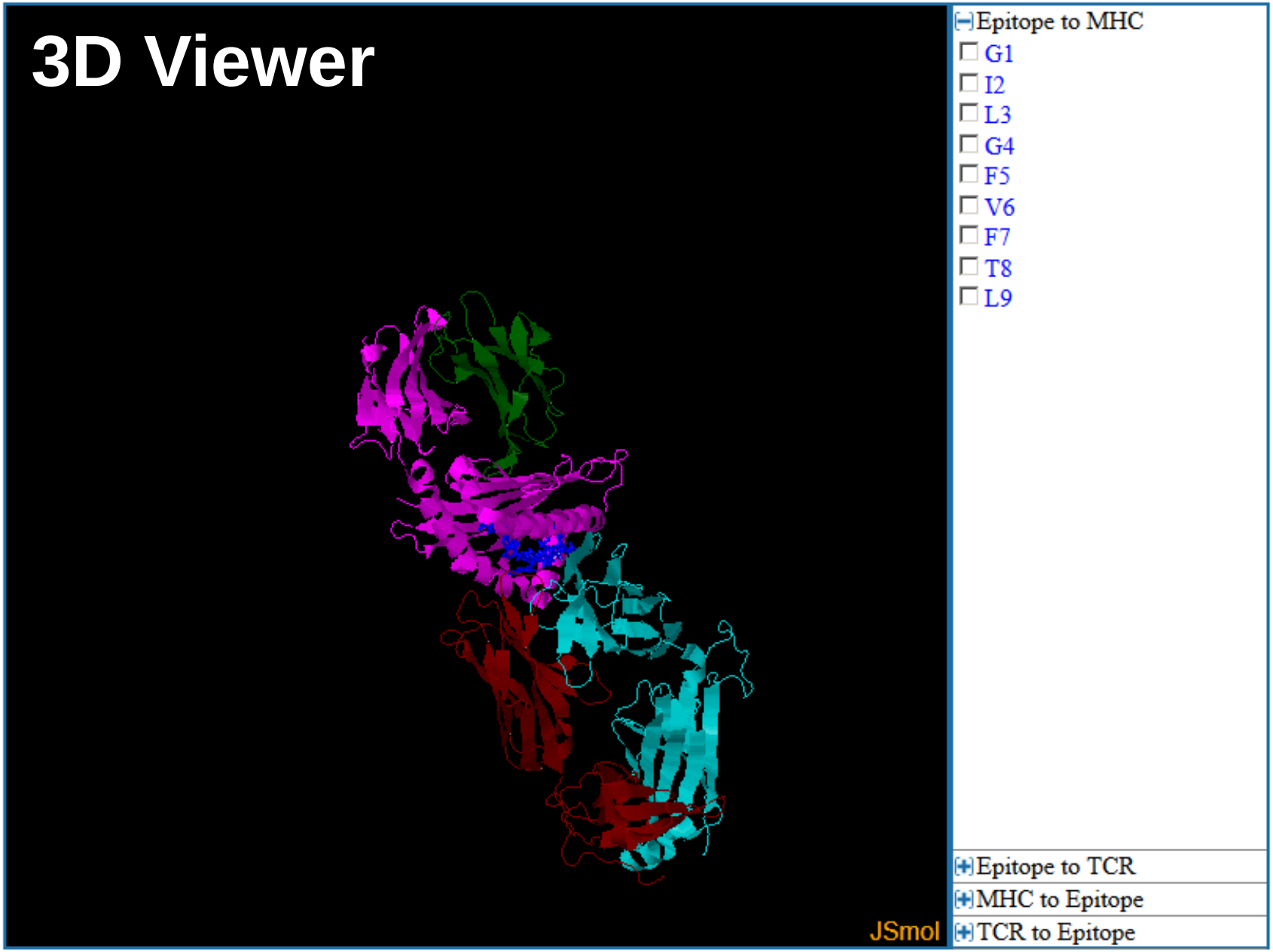


- Epitope to MHC
  - G1
  - I2
  - L3
  - G4
  - F5
  - V6
  - F7
  - T8
  - L9
- Epitope to TCR
- MHC to Epitope
- TCR to Epitope

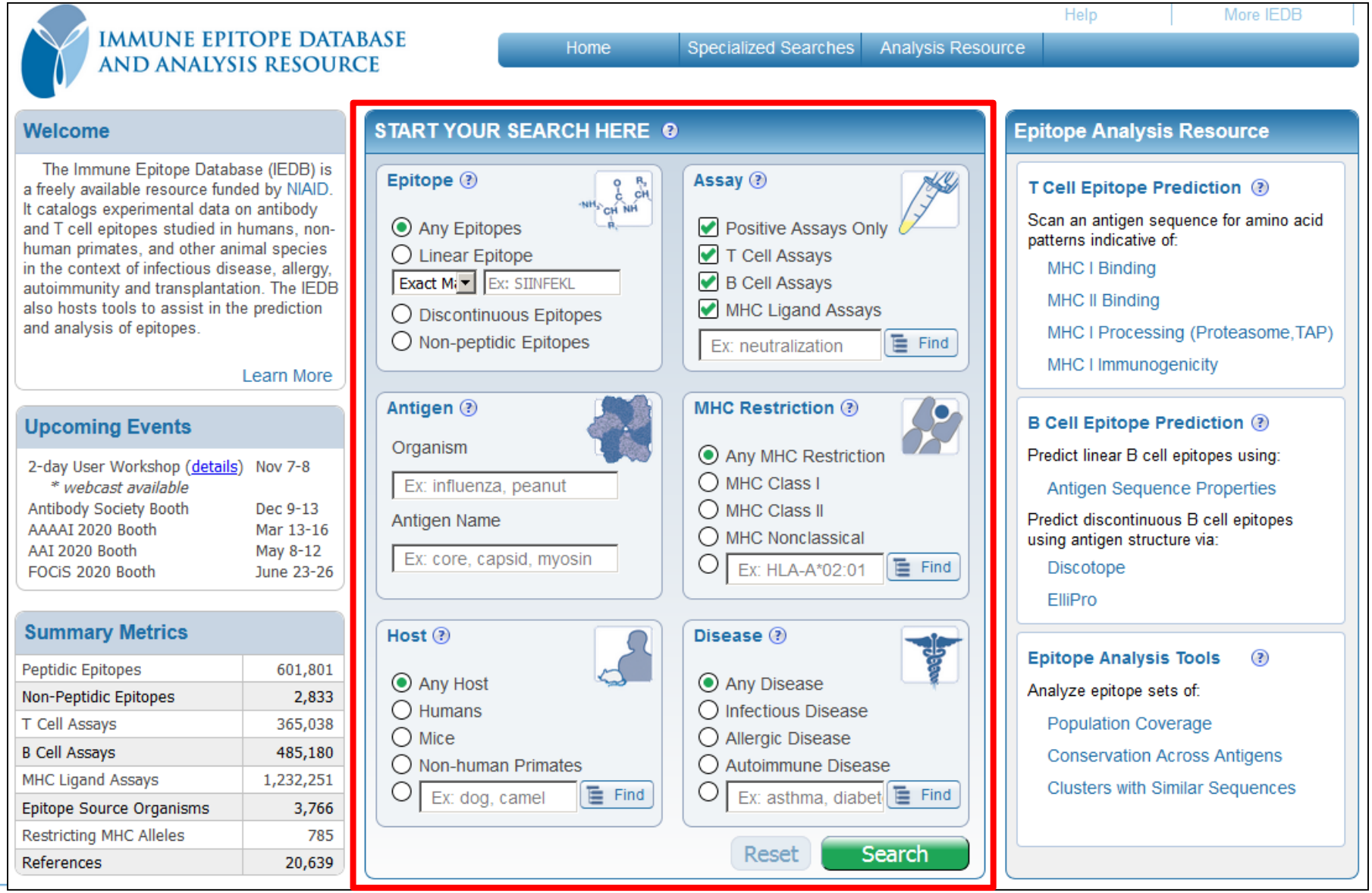
Chains: MHC-alpha MHC-b2m TCR-Chain 1 TCR-Chain 2 Epitope Chain

Calculated contacts: Epitope to MHC Epitope to TCR MHC to Epitope TCR to Epitope

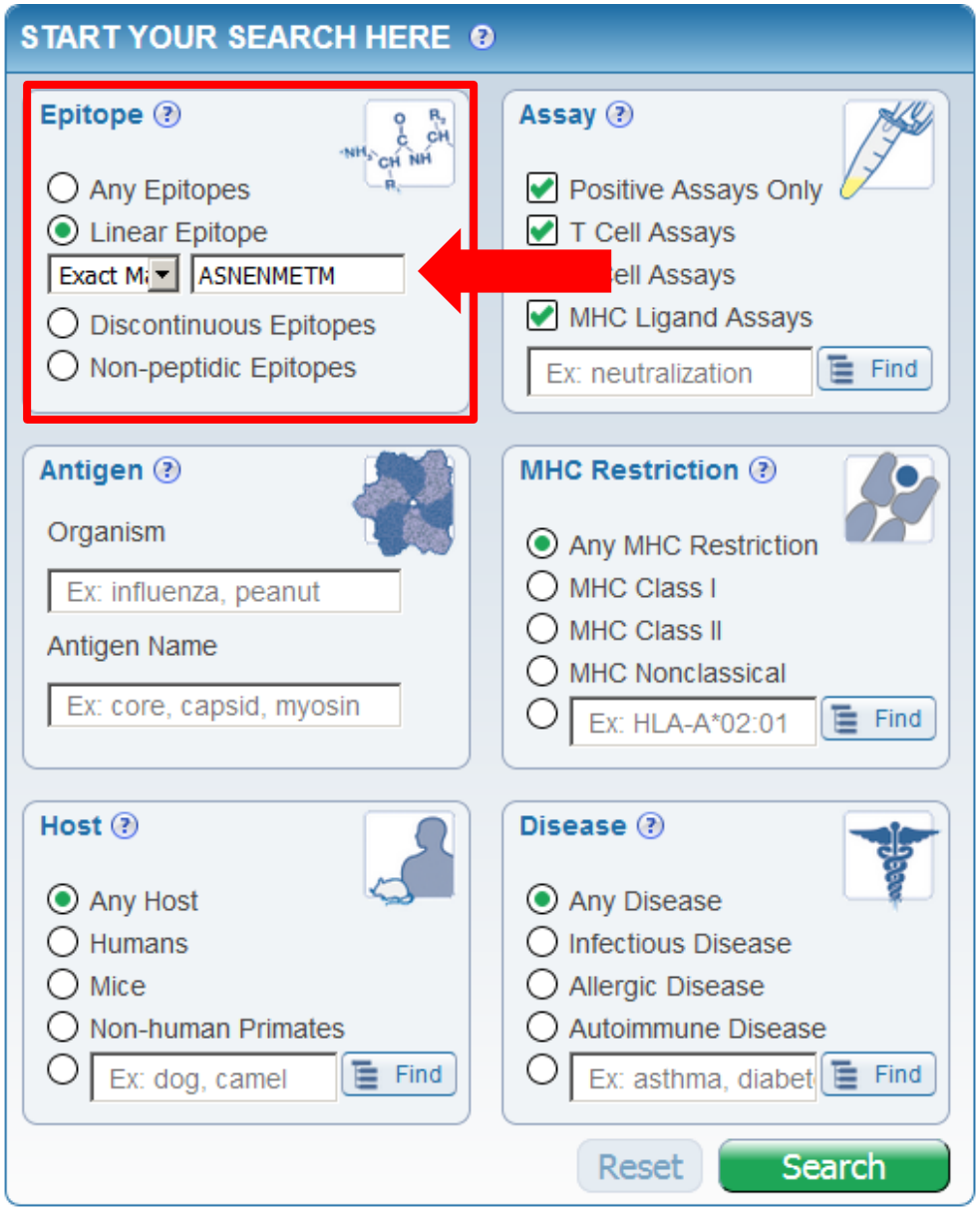
3D Viewer

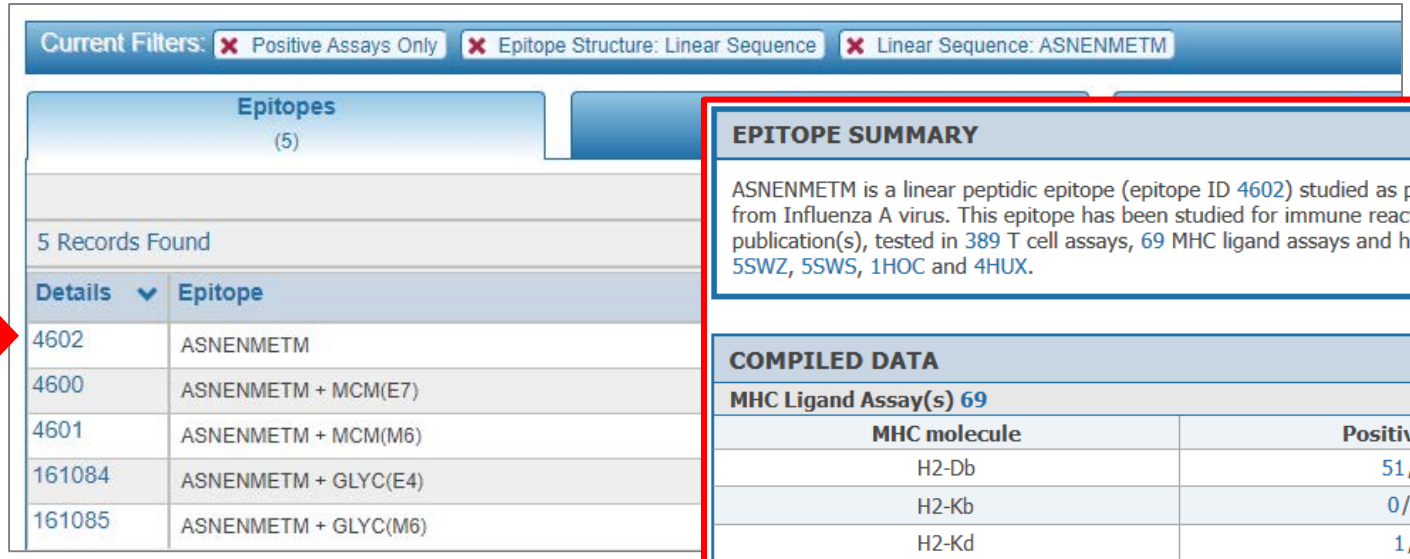

Epitope to MHC
G1
I2
L3
G4
F5
V6
F7
T8
L9
Epitope to TCR
MHC to Epitope
TCR to Epitope
JSmol
Chains: MHC-alpha MHC-b2m TCR-Chain 1 TCR-Chain 2 Epitope Chain
Calculated contacts: Epitope to MHC Epitope to TCR MHC to Epitope TCR to Epitope

IEDB.org: homepage & search interface



Epitope Search - Exact Sequence





EPITOPE SUMMARY

ASNENMETM is a linear peptidic epitope (epitope ID 4602) studied as part of Nucleoprotein from Influenza A virus. This epitope has been studied for immune reactivity in 154 publication(s), tested in 389 T cell assays, 69 MHC ligand assays and has 3D structure(s) 5SWZ, 5SWS, 1HOC and 4HUX.

COMPILED DATA

MHC Ligand Assay(s) 69

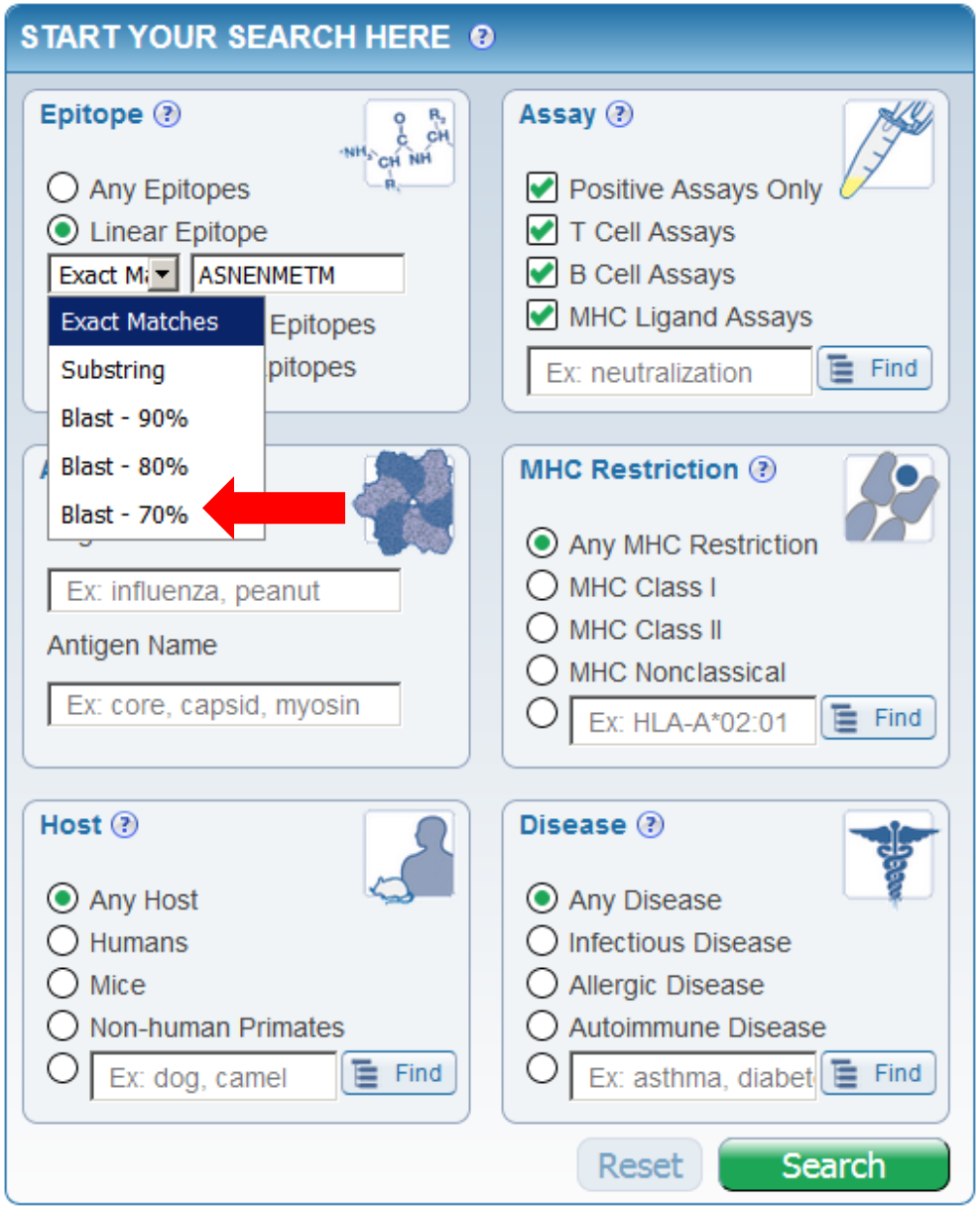
MHC molecule	Positive / All
H2-Db	51/51
H2-Kb	0/10
H2-Kd	1/4
H2-Db H155A mutant	2/2
H2-Dd	0/1
H2-Ld	0/1

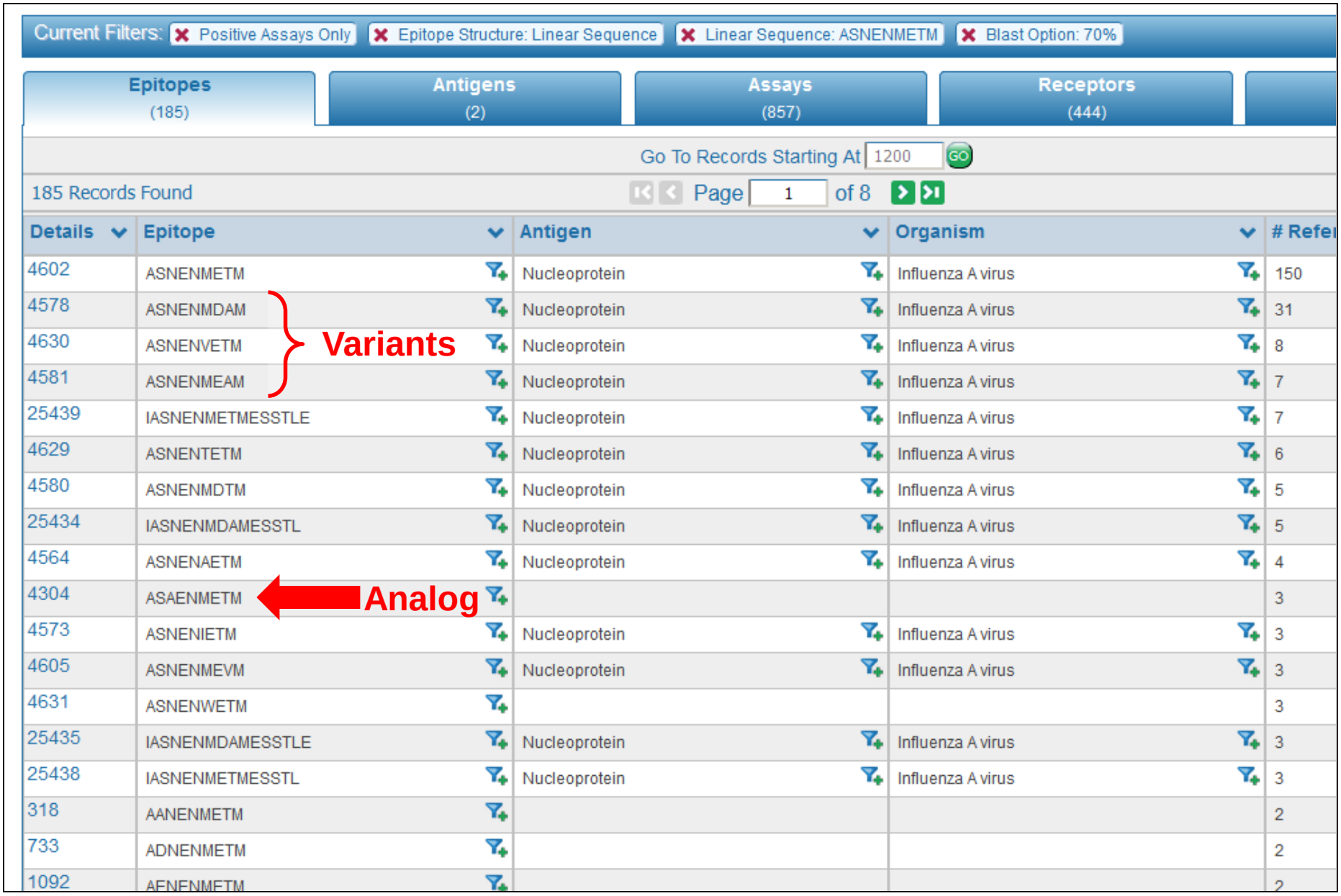
T Cell Assay(s) 389

Assay Type	Positive / All
qualitative binding	128/137
IFNg release	107/111
cytotoxicity	55/56
IL-2 release	29/29
TNFa release	20/20
TNF release	6/6
granzyme B release	5/5
degranulation	4/4
IL-4 release	4/4
activation	3/4
pathogen burden after challenge	3/4
proliferation	3/3
3D structure	2/2
dissociation constant KD	2/2
survival from challenge	1/1
tolerance	0/1

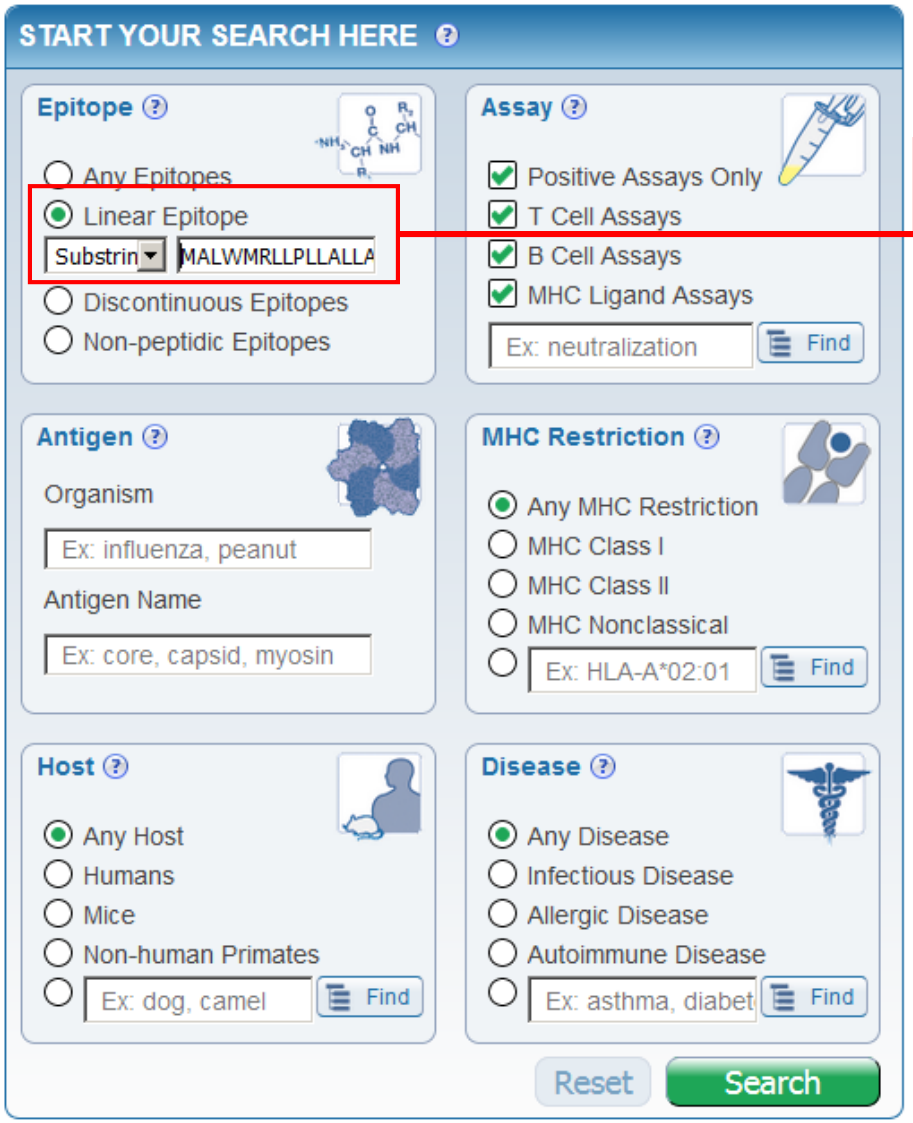
http://www.iedb.org/epitope/4602

Epitope Search - BLAST




Current Filters: Positive Assays Only | Epitope Structure: Linear Sequence | Linear Sequence: ASNENMETM | Blast Option: 70%
Epitopes (185)
Antigens (2)
Assays (857)
Receptors (444)
Go To Records Starting At 1200 GO
185 Records Found
Page 1 of 8
Details | Epitope | Antigen | Organism | # Refe
4602 ASNENMETM Nucleoprotein Influenza A virus 150
4578 ASNENMDAM Nucleoprotein Influenza A virus 31
4630 ASNENVETM Nucleoprotein Influenza A virus 8
4581 ASNENMEAM Nucleoprotein Influenza A virus 7
Variants
25439 IASNENMETMESSTLE Nucleoprotein Influenza A virus 7
4629 ASNENTETM Nucleoprotein Influenza A virus 6
4580 ASNENMDTM Nucleoprotein Influenza A virus 5
25434 IASNENMDAMESSTL Nucleoprotein Influenza A virus 5
4564 ASNENAETM Nucleoprotein Influenza A virus 4
4304 ASAENMETM 3
Analog
4573 ASNENIETM Nucleoprotein Influenza A virus 3
4605 ASNENMEVM Nucleoprotein Influenza A virus 3
4631 ASNENWETM 3
25435 IASNENMDAMESSTLE Nucleoprotein Influenza A virus 3
25438 IASNENMETMESSTL Nucleoprotein Influenza A virus 3
318 AANENMETM 2
733 ADNENMETM 2
1092 AENENMETM 2

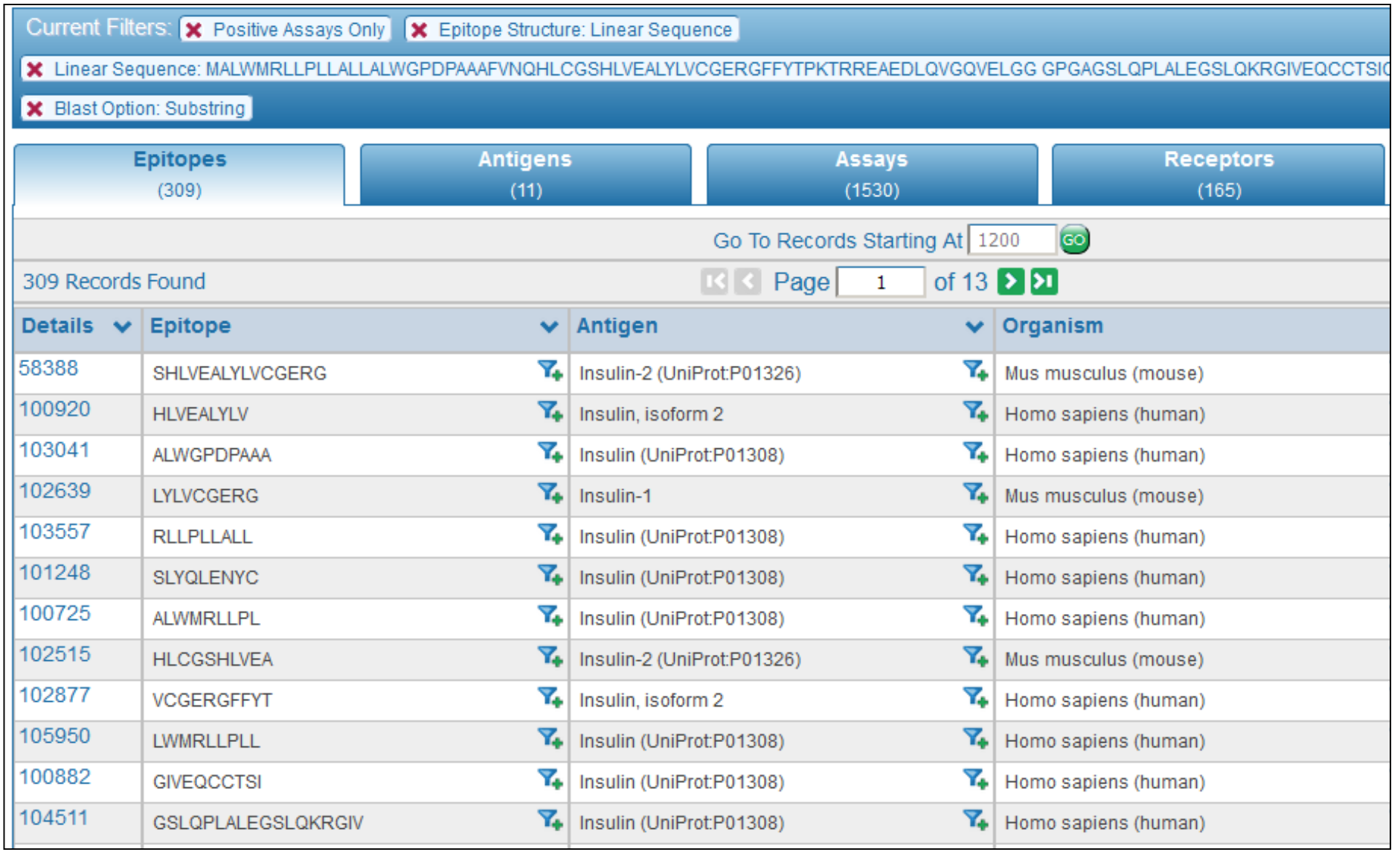
Epitope Search - Substring



Search by a known protein sequence

Paste the protein sequence and select "Substring"

Epitope Search - Substring



Current Filters: Positive Assays Only | Epitope Structure: Linear Sequence

Linear Sequence: MALWMRLLPLLALLALWGPDPAAAFVNQHLCGSHLVEALYLVCGERGFFYTPKTRREAEDLQVGQVELGG GPGAGSLQPLALEGSLQKRGIVEQCCTSIC

Blast Option: Substring

Epitopes (309) | Antigens (11) | Assays (1530) | Receptors (165)

Go To Records Starting At 1200 GO

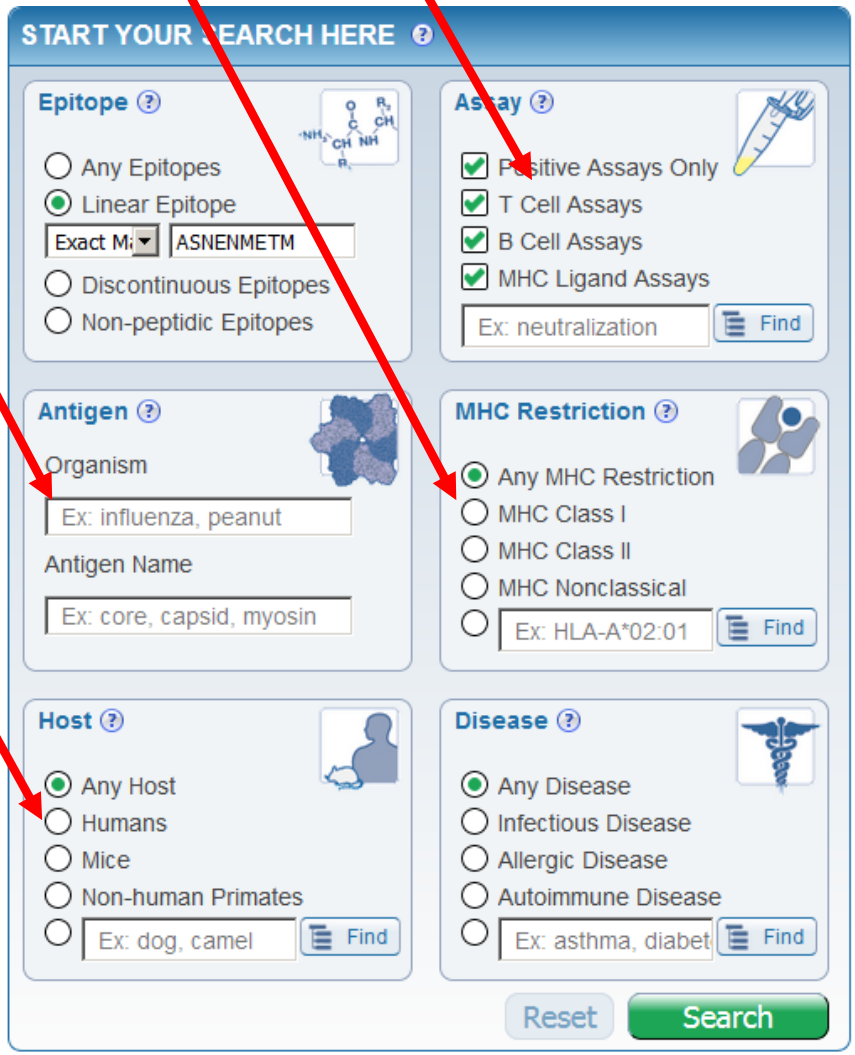
309 Records Found

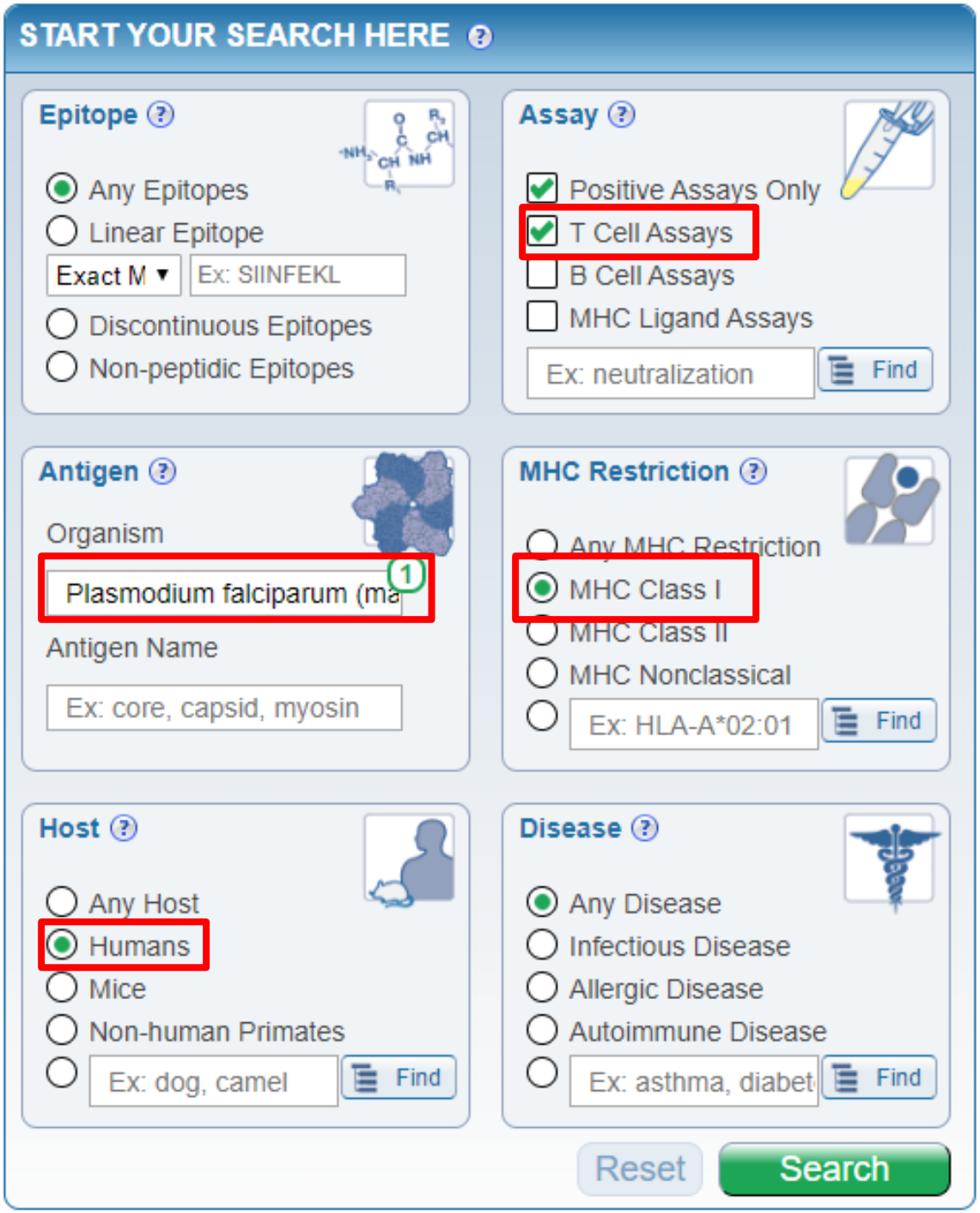
Page 1 of 13

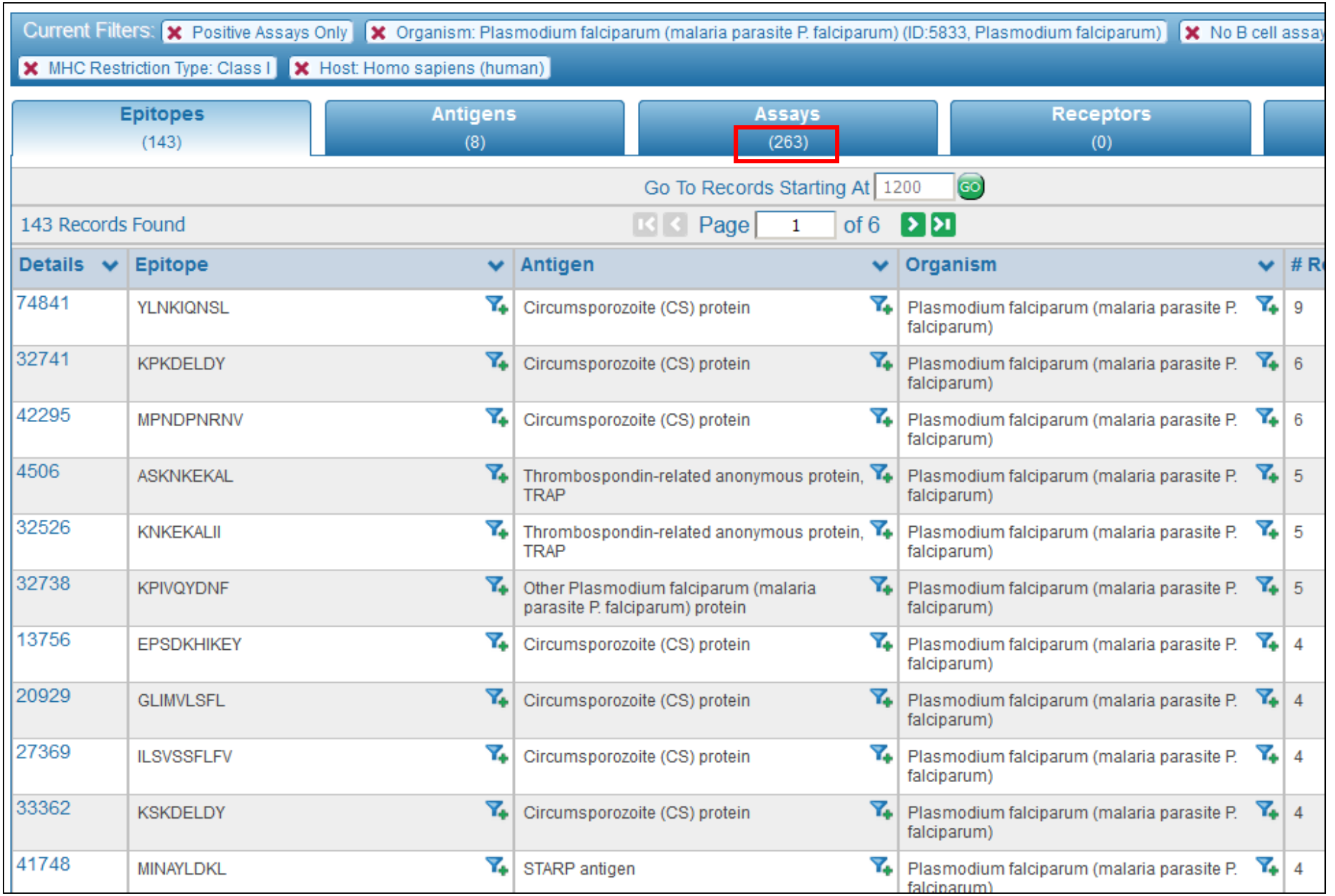
Details	Epitope	Antigen	Organism
58388	SHLVEALYLVCGERG	Insulin-2 (UniProt:P01326)	Mus musculus (mouse)
100920	HLVEALYLV	Insulin, isoform 2	Homo sapiens (human)
103041	ALWGPDPAAA	Insulin (UniProt:P01308)	Homo sapiens (human)
102639	LYLVCGERG	Insulin-1	Mus musculus (mouse)
103557	RLLPLLALL	Insulin (UniProt:P01308)	Homo sapiens (human)
101248	SLYQLENYC	Insulin (UniProt:P01308)	Homo sapiens (human)
100725	ALWMRLLPL	Insulin (UniProt:P01308)	Homo sapiens (human)
102515	HLCGSHLVEA	Insulin-2 (UniProt:P01326)	Mus musculus (mouse)
102877	VCGERGFFYT	Insulin, isoform 2	Homo sapiens (human)
105950	LWMRLLPLL	Insulin (UniProt:P01308)	Homo sapiens (human)
100882	GIVEQCCTSI	Insulin (UniProt:P01308)	Homo sapiens (human)
104511	GSLQPLALEGSLQKRGIV	Insulin (UniProt:P01308)	Homo sapiens (human)

Example Query: Search by Pathogen

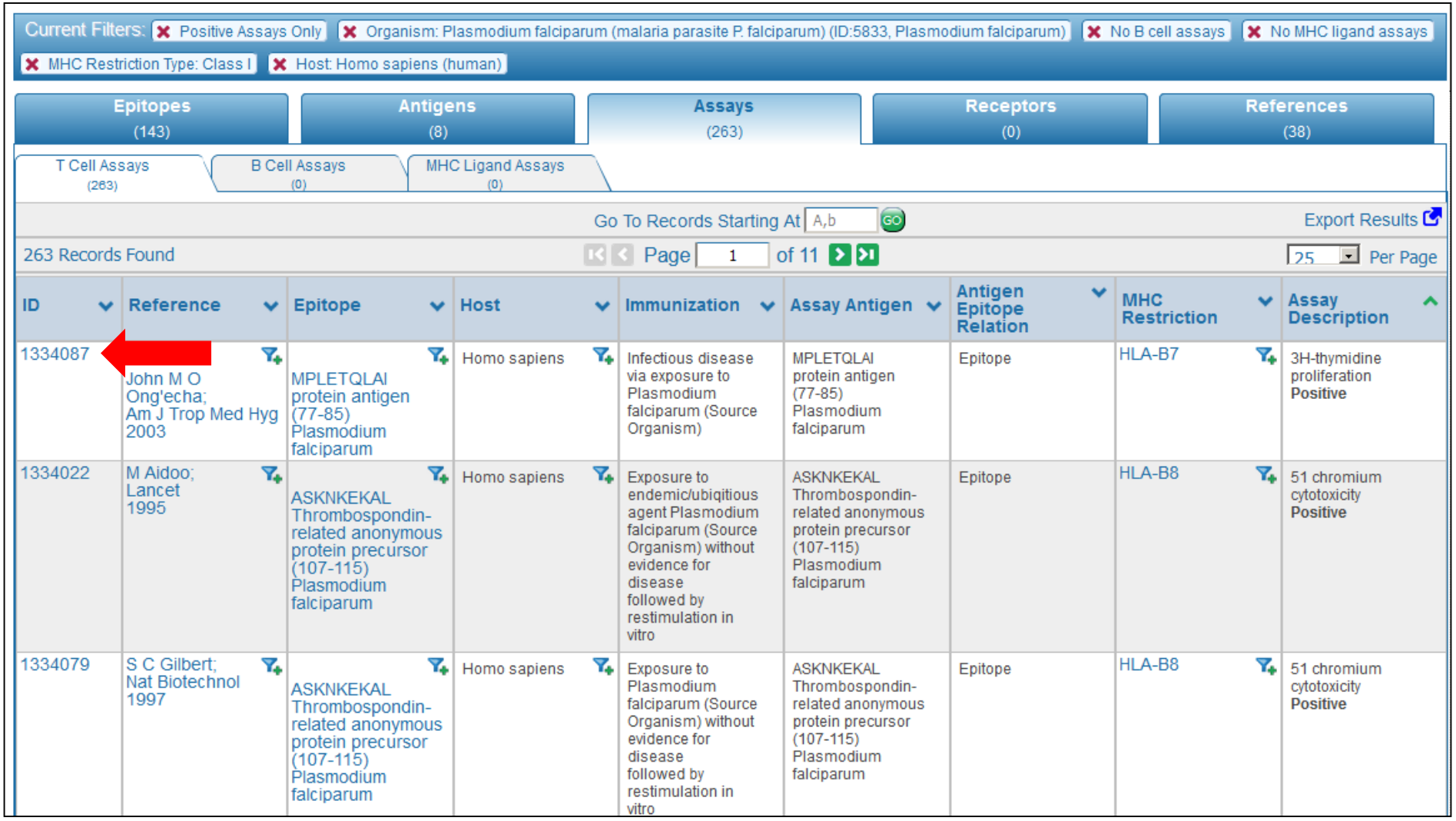
Query: Find *P. falciparum* MHC Class I-restricted T cell epitopes defined in humans.




START YOUR SEARCH HERE
Epitope
Any Epitopes
Linear Epitope
Exact M
Ex: SIINFEKL
Discontinuous Epitopes
Non-peptidic Epitopes
Assay
Positive Assays Only
T Cell Assays
B Cell Assays
MHC Ligand Assays
Ex: neutralization
Find
Antigen
Organism
Plasmodium falciparum (ma
1
Antigen Name
Ex: core, capsid, myosin
MHC Restriction
Any MHC Restriction
MHC Class I
MHC Class II
MHC Nonclassical
Ex: HLA-A*02:01
Find
Host
Any Host
Humans
Mice
Non-human Primates
Ex: dog, camel
Find
Disease
Any Disease
Infectious Disease
Allergic Disease
Autoimmune Disease
Ex: asthma, diabet
Find
Reset
Search



Details	Epitope	Antigen	Organism	# R
74841	YLNKIQNSL	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)	9
32741	KPKDELDY	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)	6
42295	MPNDPNRNV	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)	6
4506	ASKNKEKAL	Thrombospondin-related anonymous protein, TRAP	Plasmodium falciparum (malaria parasite P. falciparum)	5
32526	KNKEKALII	Thrombospondin-related anonymous protein, TRAP	Plasmodium falciparum (malaria parasite P. falciparum)	5
32738	KPIVQYDNF	Other Plasmodium falciparum (malaria parasite P. falciparum) protein	Plasmodium falciparum (malaria parasite P. falciparum)	5
13756	EPSDKHIKEY	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)	4
20929	GLIMVLSFL	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)	4
27369	ILSVSSFLFV	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)	4
33362	KSKDELDY	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)	4
41748	MINAYLDKL	STARP antigen	Plasmodium falciparum (malaria parasite P. falciparum)	4


Current Filters:
Positive Assays Only
Organism: Plasmodium falciparum (malaria parasite P. falciparum) (ID:5833, Plasmodium falciparum)
No B cell assays
No MHC ligand assays
MHC Restriction Type: Class I
Host: Homo sapiens (human)
Epitopes (143)
Antigens (8)
Assays (263)
Receptors (0)
References (38)
T Cell Assays (263)
B Cell Assays (0)
MHC Ligand Assays (0)
Go To Records Starting At A,b
GO
Export Results
263 Records Found
Page 1 of 11
25 Per Page
ID
Reference
Epitope
Host
Immunization
Assay Antigen
Antigen Epitope Relation
MHC Restriction
Assay Description
1334087
John M O Ong'echa; Am J Trop Med Hyg 2003
MPLETQLAI protein antigen (77-85) Plasmodium falciparum
Homo sapiens
Infectious disease via exposure to Plasmodium falciparum (Source Organism)
MPLETQLAI protein antigen (77-85) Plasmodium falciparum
Epitope
HLA-B7
3H-thymidine proliferation Positive
1334022
M Aidoo; Lancet 1995
ASKNKEKAL Thrombospondin-related anonymous protein precursor (107-115) Plasmodium falciparum
Homo sapiens
Exposure to endemic/ubiqitious agent Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro
ASKNKEKAL Thrombospondin-related anonymous protein precursor (107-115) Plasmodium falciparum
Epitope
HLA-B8
51 chromium cytotoxicity Positive
1334079
S C Gilbert; Nat Biotechnol 1997
ASKNKEKAL Thrombospondin-related anonymous protein precursor (107-115) Plasmodium falciparum
Homo sapiens
Exposure to Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro
ASKNKEKAL Thrombospondin-related anonymous protein precursor (107-115) Plasmodium falciparum
Epitope
HLA-B8
51 chromium cytotoxicity Positive

Assay Details – Reference Information

Reference		
Reference Type	Literature	IEDB_Reference:1002369
Title	Association of interferon-gamma responses to pre-erythrocytic stage vaccine candidate antigens of Plasmodium falciparum in young Kenyan children with improved hemoglobin levels: XV. Asembo Bay Cohort Project.	
Authors	John M O Ong'echa; Altaf A Lal; Dianne J Terlouw; Feiko O Ter Kuile; Simon K Kariuki; Venkatchalam Udhayakumar; Alloys S S Orago; Allen W Hightower; Bernard L Nahlen; Ya Ping Shi	
Affiliations	Centre for Vector Biology and Control Research, Kenya Medical Research Institute, Kisumu, Kenya.	
Journal	Am J Trop Med Hyg	PMID:12812352
Year	2003	
Abstract	Previous studies in animal models have revealed an association between interferon-gamma (IFN-gamma), produced by CD8+ T cells and irradiated sporozoite-induced sterile immunity. To determine whether IFN-gamma can serve as a marker of pre-erythrocytic protective immunity in individuals naturally exposed to malaria, we characterized IFN-gamma and lymphocyte proliferative responses to previously defined CD8+ cytotoxic T lymphocyte (CTL) epitopes from six pre-erythrocytic stage antigens in 107 children six months to two years old from a community-based birth cohort in western Kenya. We found that IFN-gamma positive responders had higher hemoglobin (Hb) levels and significantly reduced prevalence of severe malarial anemia one month after the test compared with IFN-gamma non-responders, suggesting that IFN-gamma immune responses to these pre-erythrocytic antigens were associated with protection against malarial anemia. Children who responded by lymphocyte proliferation had a significantly longer time to first documented malaria parasitemia after birth; however, there was no correlation between the presence of lymphocyte proliferative response and higher Hb levels. We propose that IFN-gamma production could be used as a potential marker of protective immunity against malaria associated anemia in young children living in malaria holoendemic areas.	
Curation Last Updated	2016-11-03 23:16:38	

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Assay Details – Epitope Information

Epitope		
Epitope ID	42290	IEDB_epitope:42290
Chemical Type	Linear peptide	
Linear Sequence	MPLETQLAI	
Source Molecule Name	protein antigen	GenPept:AAA29733.1
Source Organism	Plasmodium falciparum	NCBITaxon:5833
Starting Position	77	
Ending Position	85	

Epitope Reference Details		
Epitope Structure Defines	Exact Epitope	
Epitope Name	PL766 77-85	
Reference Starting Position	77	
Reference Ending Position	85	
Location of Data in Reference	Table 1	

scrolling down the page…

Assay Details – Immunization & Assay Info

Immunization		
Host Organism	Homo sapiens	NCBITaxon:9606

Host Details		
Host Geolocation	Kenya	GAZ:00001101
Age	6 months to 2 years	

1st In Vivo Process		
In Vivo Process Type	Occurrence of infectious disease	
Disease State	Plasmodium falciparum malaria	DOID:14067
Disease Stage	Acute/Recent onset;	

1st Immunogen		
Epitope Relation	Source Organism	
Object Type	Organism	
Organism	Plasmodium falciparum	NCBITaxon:5833

Immunogen Details		
Immunogen Reference Name	P. falciparum [Mosquito Stage] [sporozoite]	

Immunization Comments		
Immunization Comments	PBMC were harvested from 107 malaria infected children from Kenya.	

scrolling down the page…

T Cell Assay		
Qualitative Measurement	Positive	
Method/Technique	3H-thymidine	OBI:1110180
Measurement of	proliferation	

Effector Cells		
Effector Cell Tissue Type	Blood	UBERON:0000178
Effector Cell Type	T cell CD8+	CL:0000625
Effector Cell Culture Conditions	Direct Ex Vivo	

Antigen Presenting Cells		
Cell Tissue Type	Blood	UBERON:0000178
Cell Type	PBMC	CL:2000001
Cell Culture Conditions	Direct Ex Vivo	

MHC Allele		
MHC Allele Name	HLA-B7	MRO:0001587

Antigen		
Epitope Relation	Epitope	
Chemical Type	Linear peptide	
Linear Sequence	MPLETQLAI	
Source Molecule Name	protein antigen	GenPept:AAA29733.1
Source Organism	Plasmodium falciparum	NCBITaxon:5833
Starting Position	77	
Ending Position	85	

Antigen Details		
Antigen Reference Name	PL766 77-85	

Assay Reference Details		
Assay Comments by IEDB Curator	CD8+ T cells from malaria infected children proliferated in response to the epitope. Proliferative responses correlated with a longer time to first documented parasitemia.	
Location of Assay Data in Reference	Figure 1 and table 3	

Pending Filters

Reset | Search

Epitope

- Any Epitopes
- Linear Epitope
- Discontinuous Epitopes
- Non-peptidic Epitopes

☐ 3D structure available

Amino Acid Modification

Antigen

Organism: Plasmodium falciparum (m 1

Antigen Name: Ex: core, capsid, myosin

Receptor

☐ Has receptor sequence

Type: Any Type

Chain: Any Type

Sequence: Exact Matches

Assay

☑ Positive Assays Only

☑ T Cell Assays

☐ B Cell Assays

☐ MHC Ligand Assays

MHC Restriction

Pending Filters: Positive Assays Only | Organism: Plasmodium falciparum (malaria parasite P. falciparum) (ID:5833, Plasmodium falciparum) | No B ce | MHC Restriction Type: Class I | Host: Homo sapiens (human)

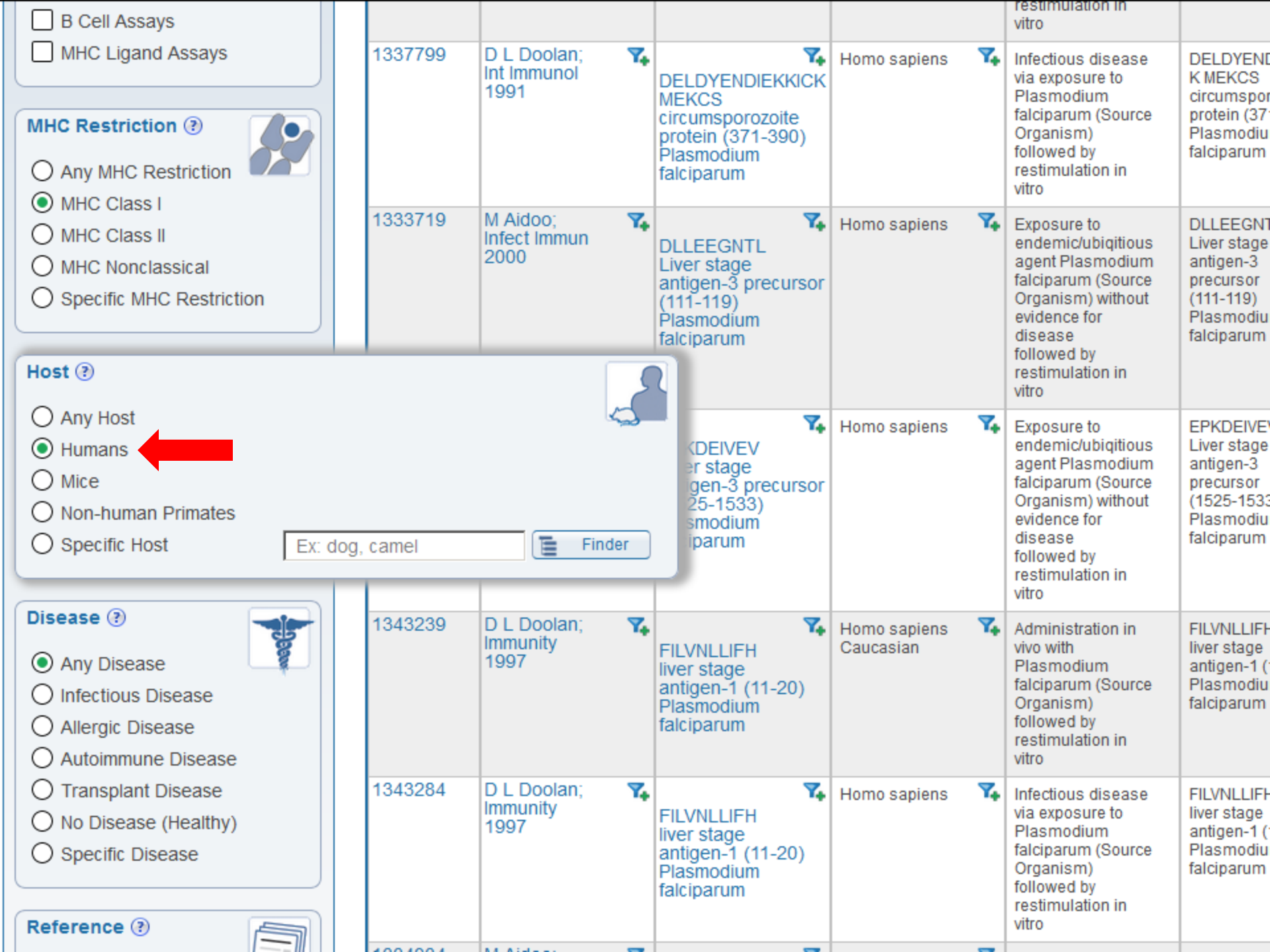
Epitopes (143) | Antigens (8) | Assays (263) | Receptors (0)

Go To Records Starting At 1200 GO

143 Records Found

Page 1 of 6

Details	Epitope	Antigen	Organism
74841	YLNKIQNSL	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)
32741	KPKDELDY	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)
42295	MPNDPNRNV	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)
4506	ASKNKEKAL	Thrombospondin-related anonymous protein, TRAP	Plasmodium falciparum (malaria parasite P. falciparum)
32526	KNKEKALII	Thrombospondin-related anonymous protein, TRAP	Plasmodium falciparum (malaria parasite P. falciparum)
32738	KPIVQYDNF	Other Plasmodium falciparum (malaria parasite P. falciparum) protein	Plasmodium falciparum (malaria parasite P. falciparum)
13756	EPSDKHIKEY	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)
20929	GLIMVLSFL	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)
27369	ILSVSSFLFV	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)
33362	KSKDELDY	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)
41748	MINAYLDKL	STARP antigen	Plasmodium falciparum (malaria parasite P. falciparum)
71265	VTCGNGIQVR	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)
20213	GIAGGLALL	Thrombospondin-related anonymous protein, TRAP	Plasmodium falciparum (malaria parasite P. falciparum)
24217	HLGNVKYLV	Thrombospondin-related anonymous protein, TRAP	Plasmodium falciparum (malaria parasite P. falciparum)
32749	KPKDELDYENDIEKKICKMEKCS	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)
39130	LRKPKHKKL	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)
42171	MMRKLAILSV	Circumsporozoite (CS) protein	Plasmodium falciparum (malaria parasite P. falciparum)


B Cell Assays
MHC Ligand Assays
MHC Restriction
Any MHC Restriction
MHC Class I
MHC Class II
MHC Nonclassical
Specific MHC Restriction
Host
Any Host
Humans
Mice
Non-human Primates
Specific Host
Ex: dog, camel
Finder
Disease
Any Disease
Infectious Disease
Allergic Disease
Autoimmune Disease
Transplant Disease
No Disease (Healthy)
Specific Disease
Reference
1337799
D L Doolan; Int Immunol 1991
DELDYENDIEKKICK MEKCS circumsporozoite protein (371-390) Plasmodium falciparum
Homo sapiens
Infectious disease via exposure to Plasmodium falciparum (Source Organism) followed by restimulation in vitro
1333719
M Aidoo; Infect Immun 2000
DLLEEGNTL Liver stage antigen-3 precursor (111-119) Plasmodium falciparum
Homo sapiens
Exposure to endemic/ubiqitious agent Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro
Homo sapiens
Exposure to endemic/ubiqitious agent Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro
1343239
D L Doolan; Immunity 1997
FILVNLLIFH liver stage antigen-1 (11-20) Plasmodium falciparum
Homo sapiens Caucasian
Administration in vivo with Plasmodium falciparum (Source Organism) followed by restimulation in vitro
1343284
D L Doolan; Immunity 1997
FILVNLLIFH liver stage antigen-1 (11-20) Plasmodium falciparum
Homo sapiens
Infectious disease via exposure to Plasmodium falciparum (Source Organism) followed by restimulation in vitro

- [ ] B Cell Assays
- [ ] MHC Ligand Assays

MHC Restriction (?)

- ( ) Any MHC Restriction
- (•) MHC Class I
- ( ) MHC Class II
- ( ) MHC Nonclassical
- ( ) Specific MHC Restriction

Host (?)

- ( ) Any Host
- ( ) Humans
- (•) Mice
- ( ) Non-human Primates
- ( ) Specific Host

Ex: dog, camel | Finder

Disease (?)

- (•) Any Disease
- ( ) Infectious Disease
- ( ) Allergic Disease
- ( ) Autoimmune Disease
- ( ) Transplant Disease
- ( ) No Disease (Healthy)
- ( ) Specific Disease

Reference (?)

				restimulation in vitro	
1337799	D L Doolan; Int Immunol 1991	DELDYENDIEKKICK MEKCS circumsporozoite protein (371-390) Plasmodium falciparum	Homo sapiens	Infectious disease via exposure to Plasmodium falciparum (Source Organism) followed by restimulation in vitro	DELDYEND K MEKCS circumspor protein (37 Plasmodiu falciparum
1333719	M Aidoo; Infect Immun 2000	DLLEEGNTL Liver stage antigen-3 precursor (111-119) Plasmodium falciparum	Homo sapiens	Exposure to endemic/ubiqitious agent Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro	DLLEEGNT Liver stage antigen-3 precursor (111-119) Plasmodiu falciparum
		KDEIVEV r stage gen-3 precursor 25-1533) smodium iparum	Homo sapiens	Exposure to endemic/ubiqitious agent Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro	EPKDEIVE Liver stage antigen-3 precursor (1525-153 Plasmodiu falciparum
1343239	D L Doolan; Immunity 1997	FILVNLLIFH liver stage antigen-1 (11-20) Plasmodium falciparum	Homo sapiens Caucasian	Administration in vivo with Plasmodium falciparum (Source Organism) followed by restimulation in vitro	FILVNLLIFH liver stage antigen-1 (Plasmodiu falciparum
1343284	D L Doolan; Immunity 1997	FILVNLLIFH liver stage antigen-1 (11-20) Plasmodium falciparum	Homo sapiens	Infectious disease via exposure to Plasmodium falciparum (Source Organism) followed by restimulation in vitro	FILVNLLIFH liver stage antigen-1 (Plasmodiu falciparum

Pending Filters

Search

Epitope

- (•) Any Epitopes
- ( ) Linear Epitope
- ( ) Discontinuous Epitopes
- ( ) Non-peptidic Epitopes

[ ] 3D structure available

Amino Acid Modification

Antigen

Organism: Plasmodium falciparum (m 1

Antigen Name: Ex: core, capsid, myosin

Receptor

[ ] Has receptor sequence

Type: Any Type

Chain: Any Type

Sequence: Exact Matches

Assay

[✓] Positive Assays Only

Pending Filters: Positive Assays Only | Organism: Plasmodium falciparum (malaria parasite P. falciparum) (ID:58 | MHC Restriction Type: Class I | Host: Mus (mice)

Epitopes (143) | Antigens (8) | Assays (263)

T Cell Assays (263) | B Cell Assays (0) | MHC Ligand Assays (0)

Go To Records Starting At: A,b

263 Records Found — Page 1 of 11

ID	Reference	Epitope	Host	Immunization	Assay An
1334087	John M O Ong'echa; Am J Trop Med Hyg 2003	MPLETQLAI protein antigen (77-85) Plasmodium falciparum	Homo sapiens	Infectious disease via exposure to Plasmodium falciparum (Source Organism)	MPLETQLA protein anti (77-85) Plasmodiu falciparum
1334022	M Aidoo; Lancet 1995	ASKNKEKAL Thrombospondin-related anonymous protein precursor (107-115) Plasmodium falciparum	Homo sapiens	Exposure to endemic/ubiqitious agent Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro	ASKNKEKA Thrombosp related ano protein pre (107-115) Plasmodiu falciparum
1334079	S C Gilbert; Nat Biotechnol 1997	ASKNKEKAL Thrombospondin-related anonymous protein precursor (107-115) Plasmodium falciparum	Homo sapiens	Exposure to Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro	ASKNKEKA Thrombosp related ano protein pre (107-115) Plasmodiu falciparum
1333740	M Aidoo; Infect Immun 2000	ATSVLAGL exported protein 1 (77-84) Plasmodium	Homo sapiens	Exposure to endemic/ubiqitious agent Plasmodium falciparum (Source Organism) without	ATSVLAGL exported pr (77-84) Plasmodiu falciparum

Current Filters: Positive Assays Only | Organism: Plasmodium falciparum (malaria parasite P. falciparum) (ID:5833, Plasmodium falciparum) | No B cell ass | MHC Restriction Type: Class I | Host: Mus (mice)

Epitopes (67) | Antigens (10) | Assays (146) | Receptors (0)

T Cell Assays (146) | B Cell Assays (0) | MHC Ligand Assays (0)

Go To Records Starting At A,b GO

146 Records Found

Page 1 of 6

ID	Reference	Epitope	Host	Immunization	Assay Antigen	Antigen Epitope Relation	MHC Restricti
1338882	G Del Giudice; Immunology 1988	NANPNANPNANP circumsporozoite protein (114-125) Plasmodium falciparum	Mus musculus	Administration in vivo with NANPNANPNANP (Epitope)	NANPNANPNANP NANP circumsporozoite protein (114-129) Plasmodium falciparum	Fragment of Source Antigen	H2-b class
1338883	G Del Giudice; Immunology 1988	NANPNANPNANP circumsporozoite protein (114-125) Plasmodium falciparum	Mus musculus	Administration in vivo with NANPNANPNANP (Epitope)	NANPNANPNANP circumsporozoite protein (114-125) Plasmodium falciparum	Epitope	H2-b class
1341485	U Blum-Tirouvanziam; J Immunol 1995	MMRKLAILSV circumsporozoite protein (1-10) Plasmodium falciparum 7G8	Mus musculus HLA-A*0201 Tg	Administration in vivo with MMRKLAILSV (Epitope)	MMRKLAILSV circumsporozoite protein (1-10) Plasmodium falciparum 7G8	Epitope	HLA-A*02
1343400	A Aggarwal; J Exp Med 1990	DELDYENDIEKKICK MEKCSS Circumsporozoite protein precursor (371-391) Plasmodium falciparum	Mus musculus	Administration in vivo with Circumsporozoite protein precursor (Source Antigen)	DELDYENDIEKKIC K MEKCSS Circumsporozoite protein precursor (371-391) Plasmodium falciparum	Epitope	H2-k class
1343008	Chaisuree	IEKYLKTIKNSLSTE	Mus musculus C57BL/10 X DBA/2	Administration in vivo with	IEKYLKTIKNSLSTE WSPCS	Epitope	H2-d class

Ex: core, capsid, myosin

Receptor ?

Has receptor sequence

Type: Any Type

Chain: Any Type

Sequence: Exact Matches

Assay ?

Positive Assays Only

T Cell Assays

B Cell Assays

MHC Ligand Assays

tetramer

Finder

qualitative binding|multimer/tetramer (**tetramer**)

proliferation|in vitro assay (**tetramer** positve)

MHC Restriction ?

- Any MHC Restriction
- MHC Class I
- MHC Class II
- MHC Nonclassical
- Specific MHC Restriction

Host ?

- Any Host
- Humans
- Mice

		(107-115) Plasmodium falciparum		evidence for disease followed by restimulation in vitro	Plasmodiu falciparum
1334079	S C Gilbert; Nat Biotechnol 1997	ASKNKEKAL Thrombospondin-related anonymous protein precursor (107-115) Plasmodium falciparum	Homo sapiens	Exposure to Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro	ASKNKEKA Thrombosp related ano protein pre (107-115) Plasmodiu falciparum
1333740	M Aidoo;	SVLAGL orted protein 1 -84) smodium iparum	Homo sapiens	Exposure to endemic/ubiqitious agent Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro	ATSVLAGL exported pr (77-84) Plasmodiu falciparum
	1991	MEKCS circumsporozoite protein (371-390) Plasmodium falciparum		Infectious disease via exposure to Plasmodium falciparum (Source Organism) followed by restimulation in vitro	DELDYEND K MEKCS circumspor protein (37 Plasmodiu falciparum
1333719	M Aidoo; Infect Immun 2000	DLLEEGNTL Liver stage antigen-3 precursor (111-119) Plasmodium falciparum	Homo sapiens	Exposure to endemic/ubiqitious agent Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro	DLLEEGNT Liver stage antigen-3 precursor (111-119) Plasmodiu falciparum
1333729	M Aidoo; Infect Immun 2000	EPKDEIVEV Liver stage antigen-3 precursor	Homo sapiens	Exposure to endemic/ubiqitious agent Plasmodium falciparum (Source	EPKDEIVE Liver stage antigen-3 precursor

Current Filters: Positive Assays Only | Organism: Plasmodium falciparum (malaria parasite P. falciparum) (ID:5833, Plasmodium falciparum) | T Cell Assays: qualitative binding|multimer/tetramer (tetramer) | No B cell assays | No MHC ligand assays | MHC Restriction Type: Class I | Host: Homo sapiens (human)

Epitopes (3) | Antigens (2) | Assays (3) | Receptors (0) | References (2)

T Cell Assays (3) | B Cell Assays (0) | MHC Ligand Assays (0)

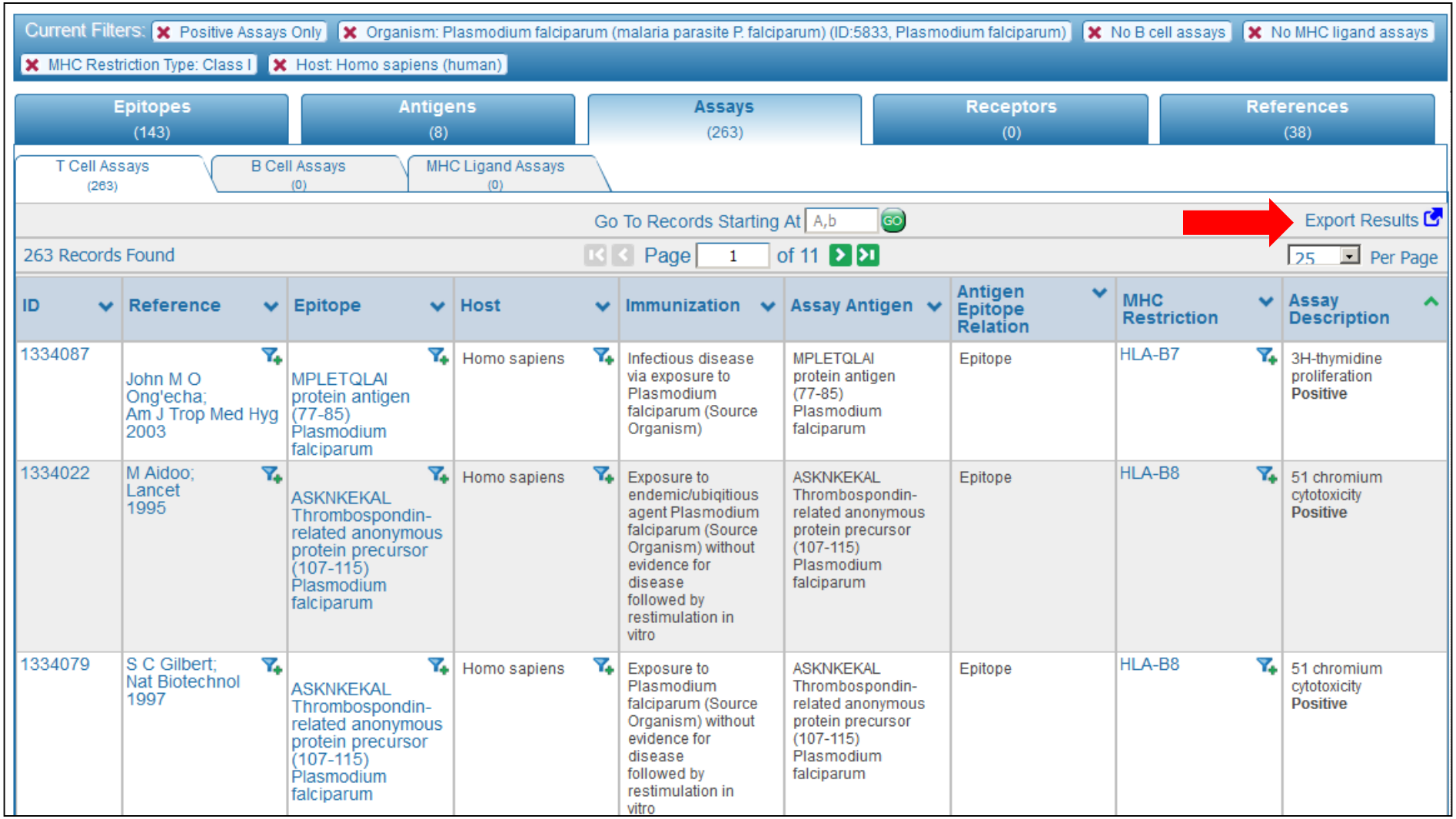
Go To Records Starting At A,b GO — Export Results

3 Records Found — Page 1 of 1 — 25 Per Page

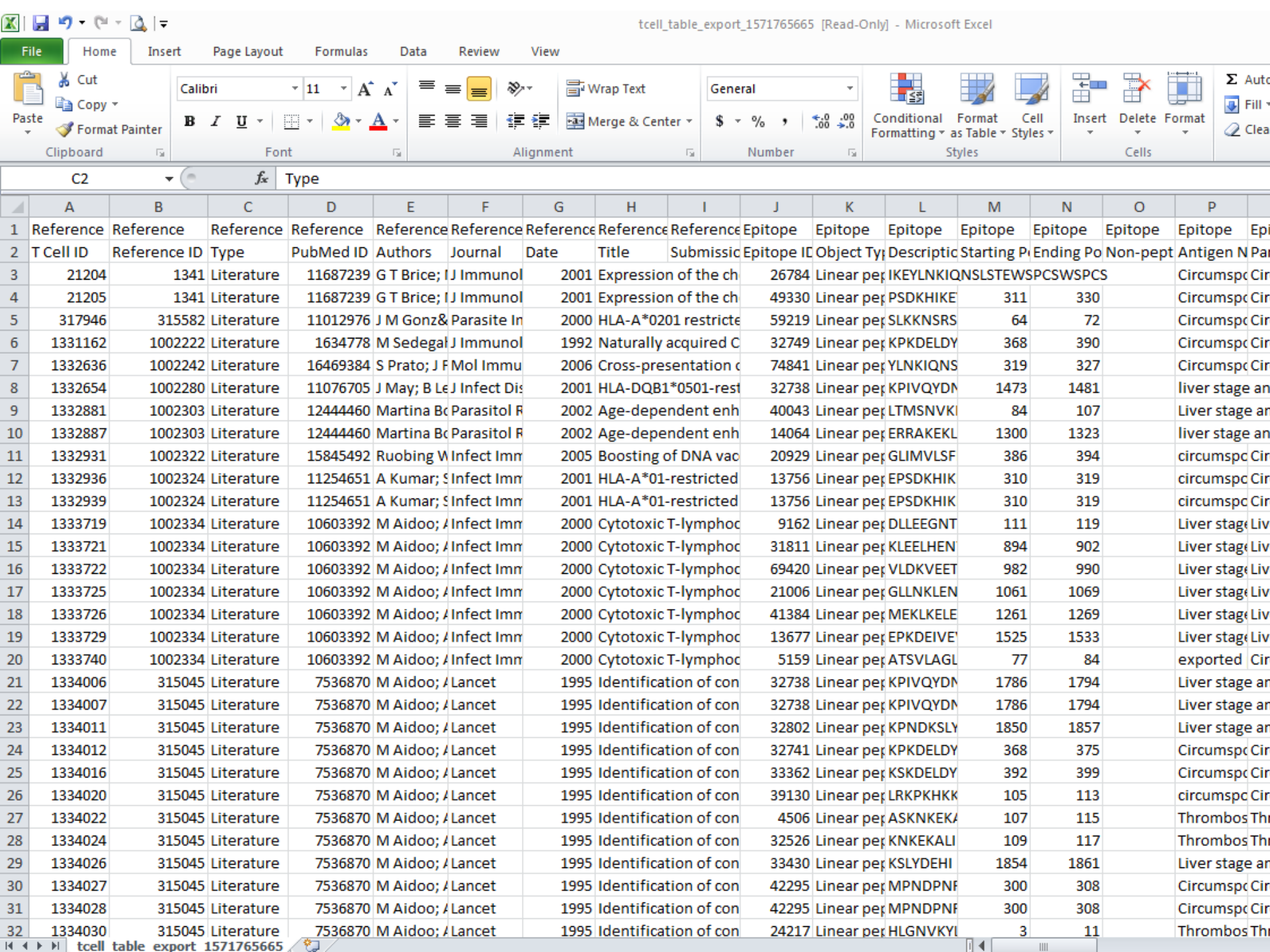
ID	Reference	Epitope	Host	Immunization	Assay Antigen	Antigen Epitope Relation	MHC Restriction	Assay Description
2918687	Xiangming Li; Vaccine 2016	YLNKIQNSL circumsporozoite protein (327-335) Plasmodium falciparum	Homo sapiens	No immunization was performed	YLNKIQNSL circumsporozoite protein (327-335) Plasmodium falciparum	Epitope	HLA-A*02:01	multimer/tetramer qualitative binding **Positive**
2022120	Robert Schwenk; Malar J 2013	NEVVVKEEY apical membrane antigen 1, AMA1 (520-528) Plasmodium falciparum 3D7	Homo sapiens	Administration in vivo with apical membrane antigen 1, AMA1 (Source Antigen)	NEVVVKEEY apical membrane antigen 1, AMA1 (520-528) Plasmodium falciparum 3D7	Epitope	HLA-B*18:01	multimer/tetramer qualitative binding **Positive**
2022115	Robert Schwenk; Malar J 2013	TLDEMRHFY apical membrane antigen 1, AMA1 (194-202) Plasmodium falciparum 3D7	Homo sapiens	Administration in vivo with apical membrane antigen 1, AMA1 (Source Antigen)	TLDEMRHFY apical membrane antigen 1, AMA1 (194-202) Plasmodium falciparum 3D7	Epitope	HLA-A*01:01	multimer/tetramer qualitative binding **Positive**

3 Records Found — Page 1 of 1 — 25 Per Page

Go To Records Starting At A,b GO — Export Results



ID	Reference	Epitope	Host	Immunization	Assay Antigen	Antigen Epitope Relation	MHC Restriction	Assay Description
1334087	John M O Ong'echa; Am J Trop Med Hyg 2003	MPLETQLAI protein antigen (77-85) Plasmodium falciparum	Homo sapiens	Infectious disease via exposure to Plasmodium falciparum (Source Organism)	MPLETQLAI protein antigen (77-85) Plasmodium falciparum	Epitope	HLA-B7	3H-thymidine proliferation **Positive**
1334022	M Aidoo; Lancet 1995	ASKNKEKAL Thrombospondin-related anonymous protein precursor (107-115) Plasmodium falciparum	Homo sapiens	Exposure to endemic/ubiqitious agent Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro	ASKNKEKAL Thrombospondin-related anonymous protein precursor (107-115) Plasmodium falciparum	Epitope	HLA-B8	51 chromium cytotoxicity **Positive**
1334079	S C Gilbert; Nat Biotechnol 1997	ASKNKEKAL Thrombospondin-related anonymous protein precursor (107-115) Plasmodium falciparum	Homo sapiens	Exposure to Plasmodium falciparum (Source Organism) without evidence for disease followed by restimulation in vitro	ASKNKEKAL Thrombospondin-related anonymous protein precursor (107-115) Plasmodium falciparum	Epitope	HLA-B8	51 chromium cytotoxicity **Positive**



tcell_table_export_1571765665 [Read-Only] - Microsoft Excel

File Home Insert Page Layout Formulas Data Review View

Paste Cut Copy Format Painter

Calibri 11 Wrap Text General

Conditional Formatting Format as Table Cell Styles Insert Delete Format

Clipboard Font Alignment Number Styles Cells

C2 Type

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Reference	Epitope	Epitope	Epitope	Epitope	Epitope	Epitope	Epitope
2	T Cell ID	Reference ID	Type	PubMed ID	Authors	Journal	Date	Title	Submissic	Epitope ID	Object Typ	Descriptic	Starting P	Ending Po	Non-pept	Antigen N
3	21204	1341	Literature	11687239	G T Brice; I	J Immunol	2001	Expression of the ch		26784	Linear pep	IKEYLNKIQ	NSLSTEWSP	CSWSPCS		Circumspc
4	21205	1341	Literature	11687239	G T Brice; I	J Immunol	2001	Expression of the ch		49330	Linear pep	PSDKHIKE	311	330		Circumspc
5	317946	315582	Literature	11012976	J M Gonz&	Parasite In	2000	HLA-A*0201 restricte		59219	Linear pep	SLKKNSRS	64	72		Circumspc
6	1331162	1002222	Literature	1634778	M Sedegal	J Immunol	1992	Naturally acquired C		32749	Linear pep	KPKDELDY	368	390		Circumspc
7	1332636	1002242	Literature	16469384	S Prato; J F	Mol Immu	2006	Cross-presentation c		74841	Linear pep	YLNKIQNS	319	327		Circumspc
8	1332654	1002280	Literature	11076705	J May; B Le	J Infect Dis	2001	HLA-DQB1*0501-rest		32738	Linear pep	KPIVQYDN	1473	1481		liver stage an
9	1332881	1002303	Literature	12444460	Martina Bc	Parasitol R	2002	Age-dependent enh		40043	Linear pep	LTMSNVKI	84	107		Liver stage an
10	1332887	1002303	Literature	12444460	Martina Bc	Parasitol R	2002	Age-dependent enh		14064	Linear pep	ERRAKEKL	1300	1323		liver stage an
11	1332931	1002322	Literature	15845492	Ruobing W	Infect Imm	2005	Boosting of DNA vac		20929	Linear pep	GLIMVLSF	386	394		circumspc
12	1332936	1002324	Literature	11254651	A Kumar; S	Infect Imm	2001	HLA-A*01-restricted		13756	Linear pep	EPSDKHIK	310	319		circumspc
13	1332939	1002324	Literature	11254651	A Kumar; S	Infect Imm	2001	HLA-A*01-restricted		13756	Linear pep	EPSDKHIK	310	319		circumspc
14	1333719	1002334	Literature	10603392	M Aidoo; A	Infect Imm	2000	Cytotoxic T-lymphoc		9162	Linear pep	DLLEEGNT	111	119		Liver stage
15	1333721	1002334	Literature	10603392	M Aidoo; A	Infect Imm	2000	Cytotoxic T-lymphoc		31811	Linear pep	KLEELHEN	894	902		Liver stage
16	1333722	1002334	Literature	10603392	M Aidoo; A	Infect Imm	2000	Cytotoxic T-lymphoc		69420	Linear pep	VLDKVEET	982	990		Liver stage
17	1333725	1002334	Literature	10603392	M Aidoo; A	Infect Imm	2000	Cytotoxic T-lymphoc		21006	Linear pep	GLLNKLEN	1061	1069		Liver stage
18	1333726	1002334	Literature	10603392	M Aidoo; A	Infect Imm	2000	Cytotoxic T-lymphoc		41384	Linear pep	MEKLKELE	1261	1269		Liver stage
19	1333729	1002334	Literature	10603392	M Aidoo; A	Infect Imm	2000	Cytotoxic T-lymphoc		13677	Linear pep	EPKDEIVE	1525	1533		Liver stage
20	1333740	1002334	Literature	10603392	M Aidoo; A	Infect Imm	2000	Cytotoxic T-lymphoc		5159	Linear pep	ATSVLAGL	77	84		exported
21	1334006	315045	Literature	7536870	M Aidoo; A	Lancet	1995	Identification of con		32738	Linear pep	KPIVQYDN	1786	1794		Liver stage an
22	1334007	315045	Literature	7536870	M Aidoo; A	Lancet	1995	Identification of con		32738	Linear pep	KPIVQYDN	1786	1794		Liver stage an
23	1334011	315045	Literature	7536870	M Aidoo; A	Lancet	1995	Identification of con		32802	Linear pep	KPNDKSLY	1850	1857		Liver stage an
24	1334012	315045	Literature	7536870	M Aidoo; A	Lancet	1995	Identification of con		32741	Linear pep	KPKDELDY	368	375		Circumspc
25	1334016	315045	Literature	7536870	M Aidoo; A	Lancet	1995	Identification of con		33362	Linear pep	KSKDELDY	392	399		Circumspc
26	1334020	315045	Literature	7536870	M Aidoo; A	Lancet	1995	Identification of con		39130	Linear pep	LRKPKHKK	105	113		circumspc
27	1334022	315045	Literature	7536870	M Aidoo; A	Lancet	1995	Identification of con		4506	Linear pep	ASKNKEKA	107	115		Thrombos
28	1334024	315045	Literature	7536870	M Aidoo; A	Lancet	1995	Identification of con		32526	Linear pep	KNKEKALI	109	117		Thrombos
29	1334026	315045	Literature	7536870	M Aidoo; A	Lancet	1995	Identification of con		33430	Linear pep	KSLYDEHI	1854	1861		Liver stage an
30	1334027	315045	Literature	7536870	M Aidoo; A	Lancet	1995	Identification of con		42295	Linear pep	MPNDPNP	300	308		Circumspc
31	1334028	315045	Literature	7536870	M Aidoo; A	Lancet	1995	Identification of con		42295	Linear pep	MPNDPNP	300	308		Circumspc
32	1334030	315045	Literature	7536870	M Aidoo; A	Lancet	1995	Identification of con		24217	Linear pep	HLGNVKYL	3	11		Thrombos

tcell_table_export_1571765665

CX	CY	CZ	DA	DB	
MHC	MHC	MHC	Assay Antigen	Assay Antigen	Assay Antigen
HLA class I	I	T cell assay -Biological process measured	Epitope	Linear peptide	TPYAGEPAPF
HLA class I	I	T cell assay -Biological process measured	Epitope	Linear peptide	ALFFIIFNK
HLA class I	I	T cell assay -Biological process measured	Epitope	Linear peptide	GLLGNVSTV
HLA class I	I	T cell assay -Biological process measured	Epitope	Linear peptide	MPLETQLAI
HLA class I	I	T cell assay -Biological process measured	Epitope	Linear peptide	FILVNLLIFH
HLA class I	I	T cell assay -Biological process measured	Epitope	Linear peptide	GVSENIFLK
HLA-A*03:01	I	MHC binding assay	Epitope	Linear peptide	LLACAGLAY
HLA class I	I	T cell assay -Biological process measured	Epitope	Linear peptide	LLACAGLAYK
HLA class I	I	T cell assay -Biological process measured	Epitope	Linear peptide	QTNFKSLLR
HLA class I	I	T cell assay -Biological process measured	Epitope	Linear peptide	VTCGNGIQVR
HLA class I	I	T cell assay -Biological process measured	Epitope	Linear peptide	TPYAGEPAPF
HLA-A*03:01	I	MHC binding assay	Epitope	Linear peptide	LLACAGLAY
HLA-B8	I	Not determined	Epitope	Linear peptide	IRLHSDASKNKEK
HLA-B8	I	Not determined	Epitope	Linear peptide	DASKNKEKALIIIK
HLA-A*02:05	I	Not determined	Epitope	Linear peptide	LLAVSSILLL
HLA-A*02:13	I	Not determined	Epitope	Linear peptide	LLAVSSILLL
HLA-B8	I	Not determined	Epitope	Linear peptide	ASKNKEKAL
HLA class I	I	T cell assay -Biological process measured	Epitope	Linear peptide	KPKDELDYENDIE
HLA-B8	I	Not determined	Epitope	Linear peptide	KNKEKALII
HLA-B8	I	Not determined	Epitope	Linear peptide	KNKEKALI
HLA-B8	I	Not determined	Epitope	Linear peptide	ASKNKEKAL
HLA-B8	I	Not determined	Epitope	Linear peptide	KNKEKALII
HLA-B8	I	Not determined	Epitope	Linear peptide	KNKEKALI
HLA class I	I	T cell assay -Biological process measured	Source Antigen	Protein	Circumsporozoit
HLA class I	I	T cell assay -Biological process measured	Epitope	Linear peptide	KPKDELDYANDIE
HLA-B*35:01	I	Not determined	Epitope	Linear peptide	KPKDELDY
HLA-B*35:01	I	Not determined	Epitope	Linear peptide	KSKDELDY
HLA-B*35:01	I	Not determined	Epitope	Linear peptide	KPNDKSLY
HLA-A*02:01	I	Not determined	Epitope	Linear peptide	MNHLGNVKYLVI
HLA-A*02:01	I	Not determined	Epitope	Linear peptide	EVDLYLLMDCSGS

Example Query: Search Autoimmunity Data

Query: Search epitopes from auto-antigens in patients with diagnosed Type 1 diabetes.

Query Parameters:

Antigen = Glutamate decarboxylase 2 (GAD)

Host = Human

Disease = Diabetes

Antigen

Organism

Homo sapiens (human) (ID 1) Finder

Antigen Name

Glutamate decarboxylase 1 1 Finder

Receptor

Has receptor sequence

Type: Any Type

Chain: Any Type

Sequence: Exact Matches

Assay

Positive Assays Only

T Cell Assays

B Cell Assays

MHC Ligand Assays

MHC Restriction

Any MHC Restriction

MHC Class I

MHC Class II

MHC Nonclassical

Specific MHC Restriction

	NGK	Myelin-oligodendrocyte glycoprotein	Mus r
		Gal d 2	Gallus
		Nucleoprotein	Influe
		mRNA export factor ICP27 homolog	Huma
	gosine		
24786	HSLGKWLGHPDKF	Myelin proteolipid protein	Mus r
48237	PKYVKQNTLKLAT	Hemagglutinin	Influe
6435	CINGVCWTV	Genome polyprotein	Hepa
130649	alpha-D-Galp-(1->3)-beta-D-Galp-(1->4)-D-GlcpNAc-yl group	Envelope glycoprotein	Murin
112742	2,4,6-trinitrophenyl group		
53112	RAHYNIVTF	Protein E7	Alpha
32208	KLVALGINAV	Genome polyprotein	Hepa
61086	SSIEFARL	Envelope glycoprotein B	Huma
65748	TPRVTGGGAM	65 kDa phosphoprotein	Huma cytom
61151	SSLENFRAYV	Polymerase acidic protein	Influe
16833	FLPSDFFPSV	Capsid protein	Hepa
6568	CLGGLLTMV	Latent membrane protein 2	Huma
30001	KAVYNFATC	Pre-glycoprotein polyprotein GP complex	Lymp mam
16878	FLRGRAYGL	Epstein-Barr nuclear antigen 3	Huma
17516	FQPQNGQFI	Nucleoprotein	Lymp mam
7493	DAEFRHDSGYEVHHQKLVFFAEDVGSNKGAIIG LMVGGVVIA	Amyloid beta A4 protein	Homo

604634 Records Found

Page 1 of 24186

Go To Records Starting At 1200

Host (?)

- ○ Any Host
- ◉ Humans
- ○ Mice
- ○ Non-human Primates
- ○ Specific Host

Disease (?)

- ○ Any Disease
- ○ Infectious Disease
- ○ Allergic Disease
- ○ Autoimmune Disease
- ○ Transplant Disease
- ○ No Disease (Healthy)
- ◉ Specific Disease

diabetes | Finder

- prediabetes syndrome [DOID:11716] (synonym: Prediabetes, Pred…
- insulin-dependent diabetes mellitus [DOID:9744] (synonym: insulin…
- non-insulin-dependent diabetes mellitus [DOID:9352] (synonym: n…

Reference (?)

- ◉ Any Reference Type
- ○ Journal Article
- ○ Submission

Author

Title

Date (Year)

Reset | Search

Supported by a contract from the National Institute of Allergy and Infectious Diseases, a component of the National Institutes of Health in the Department of Health and Human Services

Pending Filters

Reset | Search

Epitope

- (•) Any Epitopes
- ( ) Linear Epitope
- ( ) Discontinuous Epitopes
- ( ) Non-peptidic Epitopes

[ ] 3D structure available

Amino Acid Modification

Antigen

Organism: Homo sapiens (human) (ID 1

Antigen Name: Glutamate decarboxylase 1 1

Receptor

[ ] Has receptor sequence

Type: Any Type

Chain: Any Type

Sequence: Exact Matches

Assay

[✓] Positive Assays Only

Current Filters: ✖ Positive Assays Only | ✖ Organism: Homo sapiens (human) (ID:9606, Homo sapiens) | ✖ Antigen: Glutamate decarboxylase 2 ★★ [Q05329] (Glutamate decarboxylase 2) (Homo sapiens (human)) | ✖ Host: Ho | ✖ Disease Data: insulin-dependent diabetes mellitus [DOID:9744]

Epitopes (165) | Antigens (1) | Assays (383)

Go To Records Starting At 1200

165 Records Found — Page 1 of 7

Details	Epitope	Antigen	Orga
102908	VMNILLQYVV	Glutamate decarboxylase 2	Hom
101067	NFFRMVISNPAAT	Glutamate decarboxylase 2	Hom
104336	VMNILLQYV	Glutamate decarboxylase 2	Hom
138762	DVMNILLQYVVKSFDRSTKV	Glutamate decarboxylase 2	Hom
25275	IAFTSEHSHFSLK	Glutamate decarboxylase 2	Hom
138779	KVNFFRMVISNPAATHQDID	Glutamate decarboxylase 2	Hom
138782	LIAFTSEHSHFSLKKGAAAL	Glutamate decarboxylase 2	Hom
45043	NMYAMMIARFKMFPEVKEKG	Glutamate decarboxylase 2	Hom
104163	NYAFLHATDLLP	Glutamate decarboxylase 2	Hom
101054	MASPGSGFWSFGSEDGSGDS	Glutamate decarboxylase 2	Hom
101509	CFWYIPPSLRTLEDN	Glutamate decarboxylase 2	Hom
101609	ERMSRLSKVAPVIKA	Glutamate decarboxylase 2	Hom
102085	SRLSKVAPVIKARMMEYGTT	Glutamate decarboxylase 2	Hom
102216	VSYQPLGDKVNFFRMVISNPAATHQDIDFLIEEI ERLGQDL	Glutamate decarboxylase 2	Hom
102769	RMMEYGTTMV	Glutamate decarboxylase 2	Hom
102974	YVVKSFDRSTKVIDFHYPNE	Glutamate decarboxylase 2	Hom
103167	FFRMVISNPAATHQDIDFLI	Glutamate decarboxylase 2	Hom