

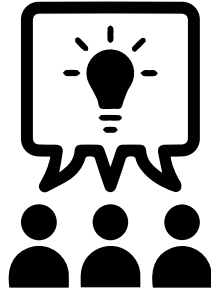


Closing Remarks & Survey

2023 IEDB Virtual User Workshop Day 3

Friday, November 3, 2023

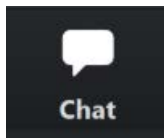
We want to hear from you!



Improve our resources
through user feedback



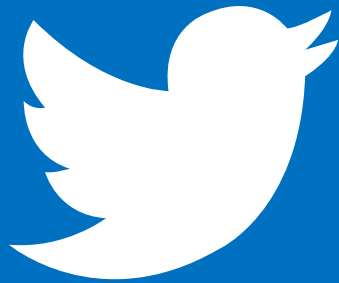
Daily and post-event
feedback survey



<https://www.surveymonkey.com/r/7BNG8LL>



**Please take some time to
complete the survey now**



#iedbuw2023

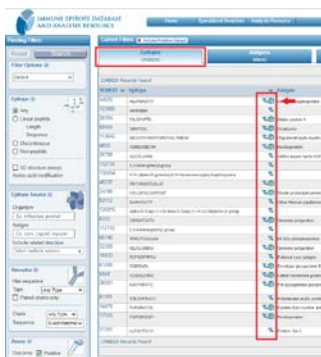
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Recap of Day 3

IEDB-3D 2.0: Visualizing Structures in the IEDB



Dr. Marcus Mendes
Bioinformatics Postdoctoral Researcher



IEDB Query API (IQ-API)



Dr. Jason Greenbaum
Bioinformatics Core Director



Recap of Day 3

The Cancer Epitope Database and Analysis Resource (CEDAR)



Dr. Zeynep Koşaloğlu-Yalçın
Instructor



CEDAR Prostate Cancer Meta-analysis



Dr. Alessandro Sette
Principal Investigator

Protein	Abbreviation	Species	Protein Accession	References	Protein Length	Epitopes ¹					Epitopes ²						
						Total	Pept	Pept	B Cell	T Cell	T Cell	MHC	MHC	Grand Total			
							Human	Mouse	Human	Mouse	Human	Mouse	Human	Mouse			
Prostatic acid phosphatase	PAP/PACP	human, mouse, rat	P11309, Q8CE08, A0A0G2K4B4		386	30	381	67	35	34	11	64	31	33	20	2	73
							381										
Prostate-specific antigen	PSA, KLK3	human	P07288		44	261	78	39	47	52	51	33	18	22	1	82	
Prostate-specific membrane antigen	PSMA	human, mouse	Q04609, Q33409		32	750	51	39	17	34	34	27	6	23	1	60	
Protein (Solute carrier family 45 member 3)	PSOI	human, mouse, rat	Q96172, Q8KH47, D3ZPP5		5	553	42	42	0	38	4	4	0	6	2	48	
Prostate stem cell antigen	PSCA	human	Q43553		6	114	18	18	1	7	17	17	0	12	2	20	
Metalloreductase STEAP1	STEAP	human, mouse	Q9UHE8, Q9CWR7		8	339	339	15	7	10	0	15	13	2	2	5	19
Transient receptor potential cation channel subfamily M member 8	TRP-ml	human, mouse	Q722W7, Q8RA09		2	1104	2	1	1	0	2	2	0	5	9	14	
TCR gamma alternate reading frame protein	TARF	human	A2JGV3.1		5	58	5	6	0	0	5	3	2	3	1	6	
Total					132	278	187	110	142	192	130	61	93	21	322		

Recap of Day 3

NIH Resources for Researchers: The LANL HIV Databases



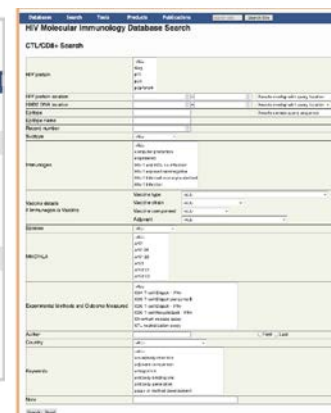
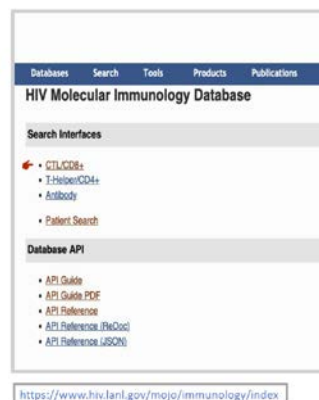
Jennifer Mamrosh
Principal Investigator



Elizabeth-Sharon Fung
Annotator, Editor



Jennifer Macke
Annotator



Recap of Day 3

IEDB, UniProt & Protein Ontology - A Collaboration



Dr. Randi Vita

Lead Ontology & Quality Manager



ANTIGEN SUMMARY

Hemagglutinin from Influenza A virus (Antigen ID [UNIPROT:P03452](#)).

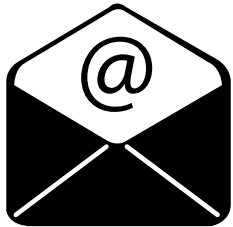
Synonyms: hemagglutinin precursor, HEMA_I34A1, L protein, Hemagglutinin, Chain A, hemagglutinin HA, hemagglutinin HA2, haemagglutinin, hemagglutinin gene, Hemagglutinin HA, hemagglutinin, partial, Influenza Virus Hemagglutinin, hemagglutinin HA1, hemagglutinin subtype H5, Hemagglutinin precursor, HAY subunit of haemagglutinin, Truncated hemagglutinin, HA2, hemagglutinin H5, HA1, HA.

This antigen has 3216 epitopes and has been studied for immune reactivity in 748 publication(s), tested in 4616 T cell assays, 5541 B cell assays and 1741 MHC ligand assays and has 128 3D structure assays.

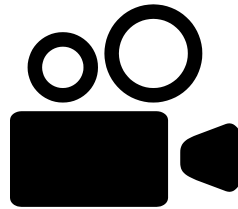
Assays in which this antigen was tested are distributed according to host: Homo sapiens (human) (6825), Mus musculus (mouse) (2941), Oryctolagus cuniculus (rabbit) (321), Vicugna pacos (alpaca) (241), Macaca mulatta (rhesus macaque) (185), Gallus gallus (chicken) (121), Sus scrofa (pig) (82), Lama glama (llama) (49), Macaca fascicularis (crab eating macaque) (39), Mustela putorius (European polecat) (24), Bos taurus (bovine) (13), Pan troglodytes (chimpanzee) (10), Anas platyrhynchos (duck) (4), Capra hircus (domestic goat) (3), Rattus norvegicus (brown rat) (2), Ovis aries (domestic sheep) (1).

Assays in which this antigen was tested are distributed according to disease state of the host: influenza (925), healthy (454), collagen-induced arthritis (CIA) (6), multiple sclerosis (6), rheumatoid arthritis (6), type 1 diabetes mellitus (3), prediabetes syndrome (1).

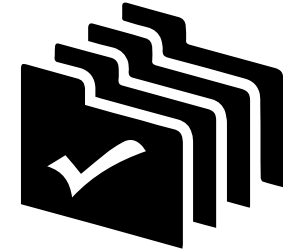
Post-Event Details



You will receive a post-event email next week



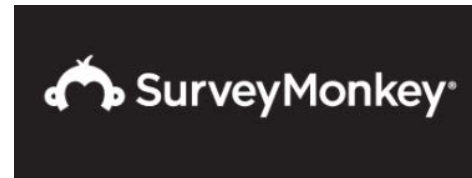
Workshop recording will be shared with you



All presentations will be shared with you



Participation certificates will be provided upon request



Post-event feedback survey

User Workshop Structure

Day 1

START YOUR SEARCH HERE

Epitope

Any

Linear peptide

Exact Ex: SIINFEKL

Discontinuous

Non-peptidic

Assay

T Cell

B Cell

MHC Ligand

Ex: neutralization

Outcome: Positive Negative

Epitope Source

Organism

Ex: influenza, peanut

Antigen

Ex: core, capsid, myosin

Host

Any

Human

Mouse

Non-human primate

Ex: dog, camel

MHC Restriction

Any

Class I

Class II

Non-classical

Ex: HLA-A*02:01

Disease

Any

Infectious

Allergic

Autoimmune

Ex: asthma

Process Overview and Database

Day 2

IEDB Analysis Resource

Overview | T Cell Tools | B Cell Tools | Analysis Tools | Tools-API | Usage | Download | Data

Epitope Prediction and Analysis Tools

Welcome to the Immune Epitope Database Analysis Resource. This site provides a collection of tools for the prediction and analysis of immune epitopes. It serves as a companion site to the [Immune Epitope Database \(IEDB\)](#), a manually curated database of experimentally characterized immune epitopes.

The tools contained fall into the following categories:

T Cell Epitope Prediction Tools

This set of tools includes MHC class I & II binding predictions, as well as peptide processing predictions and immunogenicity predictions.

B Cell Epitope Prediction Tools

The tools here are intended to predict regions of proteins that are likely to be recognized as epitopes in the context of a B cell response.

IEDB Immune Epitope Database

Welcome to the Next-Generation IEDB Tools site!

As a companion site to the Immune Epitope Database (IEDB), this site provides a collection of tools for the prediction and analysis of immune epitopes.

T Cell Prediction - Class I

MHC class I binding affinity, SAP processing, and immunogenicity predictors

Type a sequence (drag a sequence into this box or click "Text" to use the example sequence):

YIARELQIWKIYKIPKQK

MFEVVALRIVSISQCVNLTTRQLRQAVTNSPTQVYVWSDVFRSLVHSTQGLRFFSNVTRWAAHVSDTNTKRFNSVPLRFNDVYVAG

TRKQVIRSDWPTTLDGKDTGSLVNAATVAVWVQCFQPCNRFELQVYVWNAKSNWMEIFRIVYGAACITFEVGFPLDRLKQDQDK

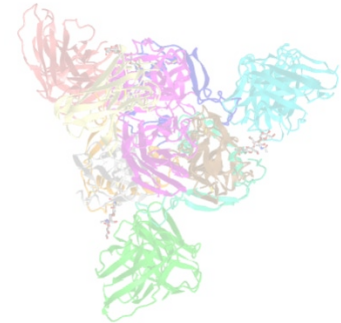
NLSTFVNVDCIYRYSKVTPLNVDLQKQFSALEPLDLDNITRQTLALMHRVSTRGSSGQWTKGAAAHVYDGLRTELLKINENGT

MHC Allele: Ex: HLA-A*02:01

More tools coming soon.

Next-Generation Tools & Analysis Resource

Day 3



CEDAR
Cancer Epitope Database and Analysis Resource

Los Alamos
NATIONAL LABORATORY

Specialized Topics – 3D Structures, Cancer, HIV



Additional Questions?

Email us at help@iedb.org



Thank you!

We appreciate your time and interest in the IEDB!