BV-BRC Test Report

S8. Epitopes Search

Item to test	Epitopes Search
URL	https://www.bv-brc.org/searches/EpitopeSearch
Prerequisites	None
References	https://www.bv-brc.org/docs/quick_references/searches_menu.html
Tester(s)	Ron Kenyon
Test date	6-May-2022
Test Result	Passed

Overview

- Test the Epitopes Search using representative search criteria.
- Test using example Pathogen Group and Protein Name.
- Test using example Keyword.
- Inspect search results to verify that they match search criteria.

Test Results

- Test results were verified by examination of returned data via inspection and filters.
- All searches returned expected data, with results matching search criteria.

Keyword and Other Search Criteria

Pathogen Group: Influenza A Virus Protein Name: nucleoprotein

Advanced Search Epitope Search

Search for epitopes of interest using generic keywords, pathogen group or taxon name, epitope id, type, sequence, protein accession or product, or assay results. For further explanation, please see the Advanced Search Quick Reference Guide.

Search term	
Pathogen Group	
Influenza A virus	-
Taxon Name	
e.g. Bacillus cereus	-
Epitope ID	
e.g. 92999	
Epitope Type	
e.g. Linear Peptide	-
Epitope Sequence	
e.g. MVYQTLMLRSRDEPF	
Protein Name	
nucleoprotein	
Protein Accession	
e.g. Q8YC41	
Assay Results	
B CELL - POS T CELL - POS MHC - POS	
B CELL - NEG T CELL - NEG MHC - NEG	
Additional	
epitope id	+

Result:

Epitope	List	View

Epitope List View EPITOPES: TAXON LINEAGE IDS IS 11320 AND PROTEIN NAME IS nucleoprotein (1272 Epitope)

Dow		DS		ADV Search					н
pit	оре Туре	Q Protein N	Name 🤍 Host Na	ame		୍ Assay Resi	ults Q		
	ontinuous peptid ar peptide (1262		Gallus g Homo s Homo s Homo s	jallus (chicken) (41) jallus Leghorn (4) apiens (1) apiens (human) (555) apiens Caucasian (22) mulatta (chesus macao	iue) (10)	0 B cell - Nega B cell - Posi MHC - Nega MHC - Posit T cell - Nega T cell - Posit	tive (26) ative (361) tive (265) ative (655)		
	Epitope ID	Epitope Type	Epitope Sequence	Organism	Protein Name	Total Assays	Bcell Assays	Tcell Assays	MHC Assays
	16522	Linear peptide	FLARSALIL	Influenza A virus	Nucleoprotein	12		1/8	4/4
	167156	Linear peptide	RRSGAAVAAHK	Influenza A virus	Nucleoprotein	2		2/2	
)	167893	Linear peptide	EDATAGLT	Influenza A virus	Nucleoprotein	2		0/2	
	167899	Linear peptide	ERMVLSAF	Influenza A virus	Nucleoprotein	3		0/3	
]	167939	Linear peptide	IRASVGRMV	Influenza A virus	Nucleoprotein	2		0/2	
	167950	Linear peptide	KRGINDRNF	Influenza A virus	Nucleoprotein	2		2/2	
]	167951	Linear peptide	KRSYEQME	Influenza A virus	Nucleoprotein	2		0/2	
)	167980	Linear peptide	NKYLEEHP	Influenza A virus	Nucleoprotein	2		0/2	
)	167989	Linear peptide	PKKTGGPIY	Influenza A virus	Nucleoprotein	2		2/2	
)	167993	Linear peptide	PSFDMSNE	Influenza A virus	Nucleoprotein	2		0/2	
]	168030	Linear peptide	VMELIRMI	Influenza A virus	Nucleoprotein	4		1/4	
)	17156	Linear peptide	FNGNTEGRTSDMRT	Influenza A virus	Nucleoprotein	2		0/1	0/1
J	173003	Linear peptide	RGINDRNFWRGENG	l Influenza A virus	Nucleoprotein	2		2/2	
]	17539	Linear peptide	FQTAAQR	Influenza A virus	Nucleoprotein	2	2/2		
)	175562	Linear peptide	AGAAVKGV	Influenza A virus	Nucleoprotein	1		0/1	
]	175569	Linear peptide	ARPEDVSF	Influenza A virus	Nucleoprotein	1		0/1	
]	175571	Linear peptide	AVKGVGTMV	Influenza A virus	Nucleoprotein	10		2/2	4/8
]	175575	Linear peptide	DGKWVREL	Influenza A virus	Nucleoprotein	1		0/1	
)	175576	Linear peptide	DGKWVRELI	Influenza A virus	Nucleoprotein	2		2/2	
]	175577	Linear peptide	DKEEIRRI	Influenza A virus	Nucleoprotein	1		0/1	

Keyword: Glycoprotein

Result:

Ep	J EPITOPES: gr	ew <mark>ycoprotein</mark> (42375 Ep	itope)								
Dow		\$		ADV Search						HIC	DE
pit	оре Туре	ৎ	Protein Name Q			۲. Host Name Q				Assay Results	
Discontinuous peptide (1098) Discontinuous peptide on multi chain (88) Linear peptide (41179) Non-peptidic (10)		(A2) fusion glycoprotein Fo precursor (5) 130 kDa Glycoprotein O (106) Attachment glycoprotein (11) BclA protein (1) Chain A, Spike glycoprotein, Spike glycoprotein (22) Chain A, Spike glycoprotein, Spike glycoprotein,inhibitor EK Chain E, AMC011 Glycoprotein 120 (1) Chain P, Hiv Envelope Glycoprotein 120 Peptide (1) Core Structure of S2 from the Human Coronavirus NL63 S ₁ E2 glycoprotein precursor (177) EBOLA VIRUS ENVELOPE GLYCOPROTEIN (10) EEV glycoprotein (1) Early E3 18.5 kDa glycoprotein (1)			Canis lupus familiaris (dogs) (95) Capra hircus (domestic goat) (12)			B cell - (2) B cell - Negative (2£ B cell - Positive (12: MHC - Negative (25 MHC - Positive (433 T cell - Negative (53 T cell - Positive (327			
	Epitope ID	Epitope Type	Epitope Sequence		Protein Name		otal Assays	stic horse) (133) Bcell Assays	Tcell Assays	MHC Assays	
ר	40984	Linear peptide	LYVKGEPII	Human orthopneumovirus	Fusion glycopro		,, , .	,	0/1	····· ·	
	68436	Linear peptide	VFCDTMNSL	Human orthopneumovirus	Fusion glycopro	tein F0 1			0/1		
	12113	Linear peptide	EFYQSTCSAV	Human orthopneumovirus	Fusion glycopro	tein F0 2			0/2		
	18454	Linear peptide	FYQSTCSAV	Human orthopneumovirus	Fusion glycopro	tein F0 3			2/3		
	67389	Linear peptide	TYMLTNSEL	Human orthopneumovirus	Fusion glycopro	tein F0 6			6/6		
	77421	Discontinuous peptide	N355, 1357	Rabies lyssavirus	Glycoprotein	1		1/1			
	19576	Linear peptide	GFLMHAPAFE	Human alphaherpesvirus 1	Envelope glyco	protein 2		0/2			
	5904	Linear peptide	AYQQGVTVDSIGMLF	Human alphaherpesvirus 1	Envelope glyco	protein 2		1/2			
	77418	Discontinuous peptide	K349, R352, I357	Rabies lyssavirus	Glycoprotein	1		1/1			
	77423	Discontinuous peptide	R352, N355, I357	Rabies lyssavirus	Glycoprotein	1		1/1			
	697081	Discontinuous peptide	B: D156; D: T45, Y46,	Human betaherpesvirus 5	Envelope glycop	protein 4		4/4			
٦	28960	Linear peptide	ITKPNIRTTLLT	Human orthopneumovirus	Major surface g	lycopro 1		0/1			
		Linear peptide	KETLHSTSPEGN	Human orthopneumovirus	Major surface g	lycopro 2		2/2			
כ	30629	Linear peptide									