

Product Brief: Peptide Pools

ImmuneSelect peptide pools can be used to replace antigen stimulation in adaptive immunity studies, providing increased stability, less variation and enhanced reproducibility compared to antigens.

How do peptide pools work?

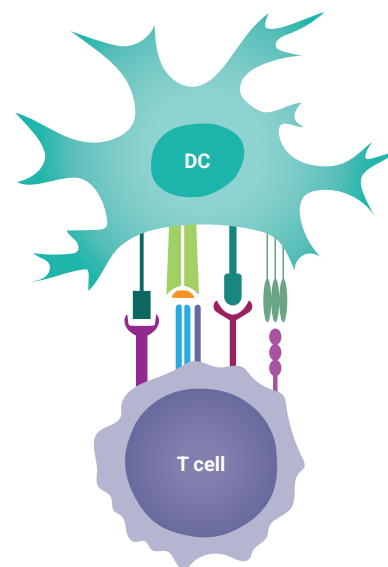
- ❖ Peptide Pools are synthesized corresponding to multiple epitopes from an antigenic protein
- ❖ The peptide selection is based on the epitope's ability to activate T cells
- ❖ Antigen specific activation can be measured by flow cytometry, ELISA, ELISpot, imaging etc.

Advantages over using antigen

Lower cost: to stimulate the same amount of PBMCs, peptide pools are considerably cheaper

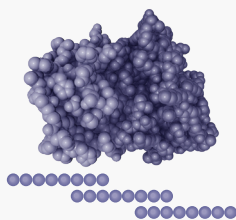
Increased stability: no lot-to-lot variation or biological variability

Easy to use: peptides are simply dissolved in water and can go through freeze/thaw cycles with much less loss of activity



Custom Solutions

We can assist with the design of peptide pools, the creation of custom libraries, and are happy to advise on the selection of epitopes, at no cost.



Complete protein sequences

You decide:

- ◆ The protein target
- ◆ The peptide length
- ◆ Selected overlapping

Applications:

- ◆ Antigen discovery
- ◆ Stimulation in cellular assays
- ◆ Epitope mapping

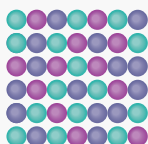
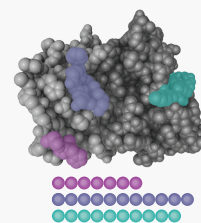
Selected epitopes

You decide:

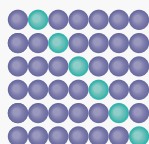
- ◆ Mono- or multi-protein
- ◆ Selected epitopes
- ◆ MHC-I or MHC-II specificity

Applications:

- ◆ Specific activation of T cells
- ◆ Control of T cell function
- ◆ Measurement of immune responses



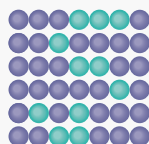
Scrambled Library



Alanine Library



Truncation Library



Random Library

Custom libraries

Contact us at support@viraxbiolabs.com to discuss your specific requirements.

Virus-derived Peptide Pool Premium

Item	Catalog Number
BKV (BK polyomavirus)	1274-07
Chikungunya Virus (CHIKV)	1205-07
CMV (Cytomegalovirus)	1012-07
Dengue Virus	1209-07
Ebola Virus	1210-07
EBV (Epstein-Barr virus)	1037-07
H. influenzae	1314-07
H5N1	1015-07
HAdV-C (Human Adenovirus C)	1201-07
HBV (Hepatitis B virus)	1215-07
HCV (Hepatitis C virus)	1217-07
HDV (Hepatitis D virus)	1219-07
HEV (Hepatitis E virus)	1222-07
HHV-6 (Human herpesvirus 6)	1229-07
HHV-8 (Human herpesvirus 8 / KSHV)	1230-07
HIV-1	1231-07
hMPV (Human metapneumovirus)	1234-07
HPV-16 (Human papillomavirus 16)	1235-07
HPV-18 (Human papillomavirus 18)	1244-07
HSV-1 (Herpes simplex virus 1)	1223-07
HSV-2 (Herpes simplex virus 2)	1224-07
HTLV (Human T-lymphotropic virus 1)	1233-07
JCV (Human polyomavirus 2)	1276-07
JEV (Japanese encephalitis virus)	1255-07
Lymphocytic Choriomeningitis Virus	1204-07
Measles Virus	1261-07
Pan-Enterovirus	1211-07
RSV (Respiratory syncytial virus)	1053-07
Rubella Virus	1288-07
SARS-CoV-2	1081-07
TBEV (Tick-borne encephalitis virus)	1292-07
VZV (Varicella-zoster virus)	1293-07
West Nile Virus	1294-07
Yellow Fever Virus	1295-07
Zika Virus	1298-07

Bacteria-derived Peptide Pool Premium

Item	Catalog Number
Bordetella pertussis	1305-07
Chlamydia trachomatis	1308-07
Escherichia coli	1311-07
Helicobacter pylori	1315-07
Borrelia burgdorferi	1374-07
Mycobacterium tuberculosis	1320-07
Pseudomonas aeruginosa	1325-07
Streptococcus pneumoniae	1333-07
Staphylococcus aureus	1330-07

Premium grade peptide pools are all **>90% HPLC purity**, contain **35-100 peptides** in each mix and are **MHC-restricted epitopes**.

Contact us at support@viraxbiolabs.com to find out how we can help you find the Peptide Pool that's right for you.