

# CTL's Cryopreserved PBMC Characterization



Cellular Technology Ltd.

CTL's cryopreserved PBMCs (Peripheral Blood Mononuclear Cells) are suited for T cell monitoring in ELISPOT, ELISA, cytokine bead array, tetramer/pentamer, flow cytometry, and cytokine capture assays or any assay which requires live PBMC.

CTL's cryopreserved PBMC are isolated and frozen in CTL-CryoABC™ serum-free freezing medium providing over 90% viability. PBMCs are ethically collected from healthy donors with no risk of breaching privacy and are tested for HBsAg, HBcAb, HCV, HTLV I/II and STS by serology as well as HIV I, HCV and WNV by NAT (nucleic acid testing).

## CTL's Cryopreserved PBMCs are characterized for:

- Age
- Gender
- Ethnicity
- Blood Type
- Vaccination status for Vaccinia (Small Pox), TB (Tuberculosis), and Hepatitis B.
- HLA-type low/high resolution results for:
  - Three Class I loci (A,B,C)
  - Four Class II loci (DRB,DQA,DQB,and DP)
- Cytokine responses to:
  - 24 Class II Individual CEF Peptides
  - 32 Class I Individual Peptides
  - Two Class I CEF-Peptide Pools
  - One Class II CEF-Peptide Pool
  - Six Protein Antigens

32 Class I Individual Peptides			
CEF-#:	HLA	Epitope/Sequence:	Source:
1	HLA-A1	VSDGGPNLY	Influenza A
2	HLA-A1	CTELKLSDY	Influenza A
3	HLA-A2	GILGFVFTL	Influenza A
4	HLA-A2	FMYSDFHFI	Influenza A
5	HLA-A2	CLGGLTMV	EBV
6	HLA-A2	GLCTLVAML	EBV
7	HLA-A2	NLVPMVATV	CMV
8	HLA-A68	KTGGPIYKR	Influenza A
9	HLA-A3	RVLSFIKGTK	Influenza A
10	HLA-A3	ILRGSVAHK	Influenza A
11	HLA-A3	RVRAYTYSK	EBV
12	HLA-A3	RLRAEAQVK	EBV
13	HLA-A3/A11/A6	SIIPSGPLK	Influenza A
14	HLA-A11	AVFDRKSDAK	EBV
15	HLA-A11	IVTDFSVIK	EBV
16	HLA-A11	ATIGTAMYK	EBV
17	HLA-A24	DYCNVLNKEF	EBV
18	HLA-B7	LPFDKTTVM	Influenza A
19	HLA-B7	RPPIFIRRL	EBV
20	HLA-B8	ELRSRYWAI	Influenza A
21	HLA-B8	RAKFKQLL	EBV
22	HLA-B8	FLRGRAYGL	EBV
23	HLA-B8	QAKWRLQTL	EBV
24	HLA-B18	SDEEEAIVAYTL	CMV
25	HLA-B27	SRYWAIRTR	Influenza A
26	HLA-B27	ASCMGLIY	Influenza A
27	HLA-B27	RRYDLIEL	EBV
28	HLA-B35	YPLHEQHGM	EBV
29	HLA-B35	IPSINVHHY	CMV
30	HLA-B44	EENLLDFVRF	EBV
31	HLA-B44	EFFWDANDIY	CMV
32	HLA-B7	TPRVTTGGAM	CMV

24 Class II Individual CEF Peptides			
CEFT-#:	HLA:	Epitope/Sequence:	Source:
1	DR4	FVFTLTPSER	Influenza A
2	DR1	SGPLKAEIAQRLEDV	Influenza A
3	DR1	YDVDPYASLRSLVASS	Influenza A
4	DR1	PYYTGEHAKAIGN	Influenza B
5	DR3, DR52c, DR52a	GQIGNDPNRDIL	Tetanus
6	DRB1*0101	PKYVKQNTLKLA	Influenza A
7	DR4	PKYVKQNTLKLAT	Influenza A
8	DR3	DRLRRDQKS	Influenza A
9	DR15	AGLTLSELLVICSYLFISRG	EBV
10	DR15, DR13, DR5, DR11, DR9, DR8, DR7, DR3	QYIKANSKFIGITEL	Tetanus
11	DR5, DR11, DRB1*1302, DRB1*1104	QYIKANSKFIGITE	Tetanus
12	DR11, DR7, DRB1*1101, DR5, DPW2	FNNFTVSFWLRVPKVSASHLE	Tetanus
13	DR1	TSLYNLRRTGALA	EBV
14	DRB1*1104, DRB1*1101	KFIKRYTPNNEIDSF	Tetanus
15	DRB1*1101,	VSIDKFRIFCKALNPK	Tetanus
16	DRB1*0701	VPGLYSPCRAFFNKEELL	EBV
17	DRB1*0801	DKREMMWACIKELH	CMV
18	DRB3*0201	TGHGARTSTEPTDY	EBV
19	DRB3*0201, DRB1*0301	KELKRQYEKKLRQ	EBV
20	DRB1*1001, DQA0102	RGYFKMRTGKSSIMRS	Influenza A
21	DQ2	TVFYNIPPMPL	EBV
23	DR4	AEGLRALLARSHVE	EBV
24	DR7	PGPLRESIVCYFMVFLQTHI	EBV

CEF Peptide Pools	
CEFP23HLA1	23 Class 1 CEF Peptide pool
CEFP32HLA1	32 Class 1 CEF Peptide pool
CEF-Tp	Class II CEF Peptide pool
Protein Antigens	
Mosquito	Mosquito Protein
Dust Mite	Dust Mite Protein
Mumps	Mumps Protein
Candida	Candida Protein
PPD	PPD Protein
PHA	Phaseolus vulgaris phytohaem-agglutinin

Custom immune characterizations available upon request.

Investigators are advised to determine optimal concentrations for individual applications. CTL recommends 300,000 / well concentration for ELISPOT. Cell concentration per vial is 10 million cells per ml. For laboratory research use only, not for diagnostic use.

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