



Reference Sample QC Set™

T cell assay development, standardization and comparison made simple

CTL

CTL has recently developed Reference Sample QC Sets™.

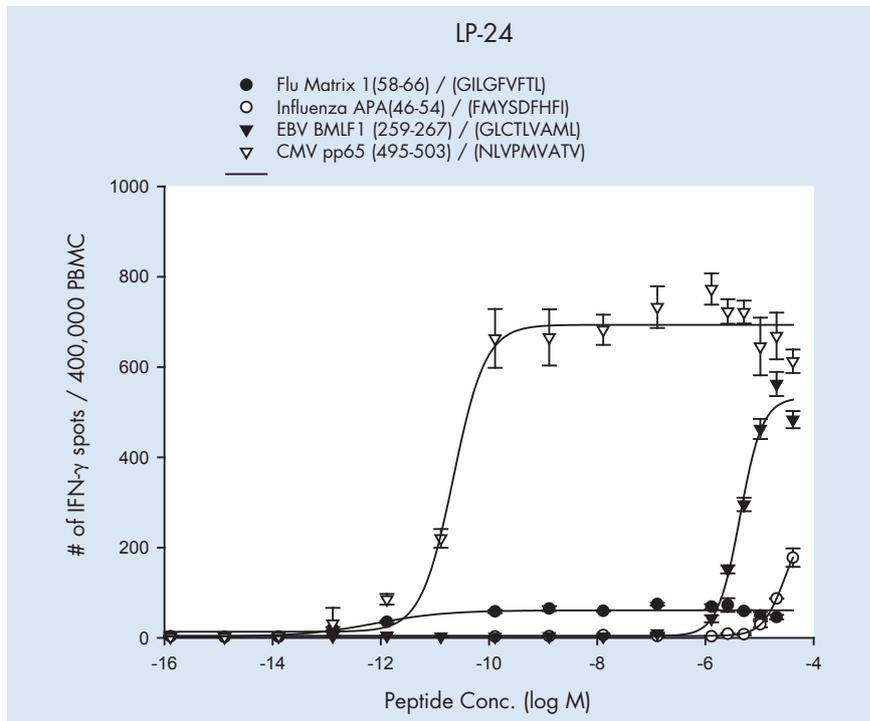
These Reference Samples are crucial in assay standardization since T cell production of IFN-gamma and IL-2 measurement plays an important role in biomedical research and vaccine development.

CTL's Reference Sample QC Set™ can be used not only for validation and protocol setup purposes, but also as internal controls for clinical trials (same donor with known reactivity against specific peptide-antigens), every time an assay from the same trial is run. They offer great inter-assay control. Based on validation results, the samples can be used to define cutoff values for acceptance of the assay.

Many applications can benefit from the usage of CTL's Reference Sample QC Sets™ including:

- ELISPOT
- Tetramers/Pentamers
- Intracytoplasmic cytokine staining (ICS)
- Cytokine ELISA assays
- Cytokine bead arrays (CBA)
- Cytokine protein arrays (CPA)
- Cytokine mRNA determinations (RT-PCR)

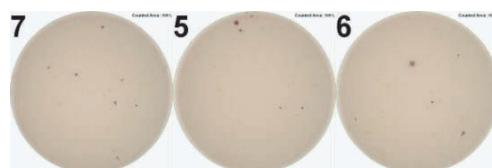
CTL's Reference Sample QC Sets™ include one vial of fully HLA-typed cryopreserved PBMC with three vials of ready-to-use HLA Class-I - restricted peptides that elicit a high and low frequency and no response to IFN-gamma producing CD8 cells in the PBMC (virus, epitope, HLA restriction, and sequence provided).



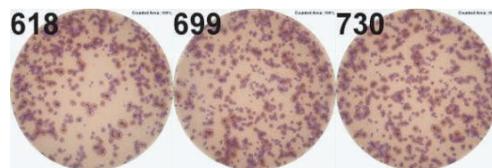
PBMC of an HLA-A2 positive donor were tested in an IFN-gamma ELISPOT assay while titrating the specified HLA-A2 restricted viral peptides. Based on the peptide dose response curves, high or low frequency - high or low affinity CD8 cell responses have been defined for the donor.



Flu Matrix/Influenza M(58-66) (GILGFVFTL)



Influenza A PA (46-54) (FMYSDFHFI)



CMV pp65 (495-503) (NLVPMVATV)



Media

Well images scanned using a CTL ImmunoSpot® Analyzer and counted with CTL ImmunoSpot® Software. The well images shown here were obtained with 10nM concentration of the CMV pp65 (NLVPMVATV), Flu Matrix/Influenza M (GILGFVFTL) and Influenza A PA (FMYSDFHFI).