

CD4 Cytoplasmic Tail Monoclonal Antibody

ORDERING INFORMATION

Catalog No.	Clone No.	MAb Subtype	Size
18715	10C12	IgG1	100ug

Format: Protein G-purified antibody in PBS, pH 7.4.

BACKGROUND

CD4 is a co-receptor of the T-cell receptor (TCR) and assists the TCR in communicating with antigen-presenting cells. The short cytoplasmic/intracellular tail of CD4 contains a special sequence of amino acids that allow it to recruit and interact with the tyrosine kinase Lck (lymphocyte-specific protein tyrosine kinase). When the TCR and CD4 bind to distinct regions of an antigen-presenting MHCII molecule, tyrosine kinase Lck bound to the cytoplasmic tail of CD4 tyrosine-phosphorylates immunoreceptor tyrosine activation motifs (ITAM) on the cytoplasmic domains of CD3 to amplify the signal generated by the TCR. Many functions have been assigned to the cytoplasmic tail of CD4 including anti-viral regulation (down/up regulation of CD4), T-cell maturation, activation and differentiation, and Lck signal transmission.

SPECIFICATION SUMMARY

Antigen: Synthetic peptide corresponding to aa 414-433 (LSEKKTCCQCPHRFQKTCSPI) of the cytoplasmic tail region of human CD4.

Accession no.: P01730

Host Species: Mouse

Specificity: This antibody recognizes an epitope within the region of amino acids 414-433 of the cytoplasmic tail region of human CD4.

APPLICATIONS

ELISA: use at 10-20ug/ml. Optimized with 25ug cell lysate (Jurkat, H9, HeLa) on the solid phase.

Immunofluorescence: use at 5-10ug/ml. Optimized with CEM cells adhered to glass slides with poly-L-lysine and fixed in paraformaldehyde.

Immunoblotting: use at 5-10ug/ml.

DILUTION INSTRUCTIONS

Dilute in PBS or medium that is identical to that used in the assay system.

STORAGE AND STABILITY

This antibody is stable for at least one (1) year at -20°C. Store product in appropriate aliquots to avoid multiple freeze-thaw cycles.

For in vitro investigational use only. Not for use in therapeutic or diagnostic procedures.