Human CD4 Antibody

Recombinant Monoclonal Human IgG_2 Clone # 30345-1

Catalog Number: MAB11530

DESCRIPTION

Species Reactivity	Human
Specificity	Detects recombinant human CD4 in direct ELISA
Source	Recombinant Monoclonal Human IgG_2 Clone # 30345-1
Purification	Protein G purified from cell culture supernatant
Immunogen	PHA-stimulated PBMCs
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

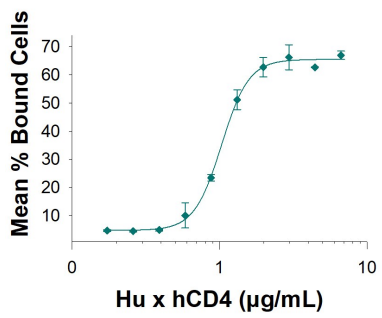
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Cell Depletion	2 µg/mL	Selects CD4+ cells when immobilized to cell culture plate or bead

DATA

Cell Depletion



Immobilized recombinant CD4 antibody supports the adhesion of SUP-T1 cells to cell culture plates. The CD4 antibody was coated onto cell culture plates at increasing amounts. The wells were then incubated with calcein labeled SUP-T1 cells, and cell binding was detected using a fluorescence-based plate reader. The ED_{50} for this effect is 0.200-2.00 µg/mL.

PREPARATION AND STORAGE

Reconstitution	Reconstitute lyophilized material at 0.2mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped at ambient temperature or with polar packs. Upon receipt, store it immediately at the temperature
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

This Bio-Techne CD4 Antibody is a reformatted version of the RPA-T4 clone. CD4 is an approximately 55 kDa type I membrane glycoprotein that is expressed predominantly on most thymocytes and a subset of mature T lymphocytes. In humans, CD4 is also expressed to a lesser extent on monocytes and macrophage related cells. Human CD4 cDNA encodes a 458 amino acid (aa) residue precursor protein with a 25 aa residue signal peptide, a 371 aa residue extracellular region containing four immunoglobulin homology domains, a 24 aa residue transmembrane domain and a 38 aa residue cytoplasmic domain. CD4 is a coreceptor required for T cell recognition of antigens that are presented by class II major histocompatibility complexes. CD4 has been shown to be a coreceptor of HIV entry and specifically binds gp120, the external envelope glycoprotein of HIV.

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