

Anti-CD4 [DB81] Standard Size Ab01170-10.3

This antibody was created using our proprietary Fc Silent™ engineered Fc domain containing key point mutations that abrogate binding to Fc gamma receptors.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG1 format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa

Clone Number: DB81

Alternative Name(s) of Target: Lu/T4; T-cell surface glycoprotein CD4; T-cell surface antigen T4/Leu-3

UniProt Accession Number of Target Protein: P01730

Published Application(s): neutralising, ELISA, FC

Published Species Reactivity: Human

Immunogen: This antibody was raised by immunising BALB/c mice with human CD4 complexed with HIV-1 Env (gp120).

Specificity: This antibody is specific for human CD4, and recognises an epitope in the vicinity of a 13-amino acid loop in domain 2 of CD4. It cross-reacts with chimpanzee CD4, but not baboon or macaque CD4.

Application Notes: This antibody preferentially binds to a complex-enhanced epitope on the D2 domain of human CD4. Plasmon resonance analysis has shown that the binding affinity of this antibody to the CD4-gp120 complex is almost one order of magnitude higher than its binding to CD4 alone (Burastero et al, 2011), while ELISA analysis has confirmed that the epitope recognised by this antibody does not involve gp120 (Burastero et al, 2011). This antibody, through a post-binding mechanism, inhibits the cell fusion and replication of a range of HIV-1 strains (Burastero et al, 2011). It does not exert inhibitory effects on T-cell activation in vitro, a useful property for clinical use.

Antibody First Published in: Burastero et al. Broad-Spectrum Inhibition of HIV-1 by a Monoclonal Antibody Directed against a gp120-Induced Epitope of CD4 PLoS One. 2011; 6(7): e22081. [PMID:21818294](#)

Note on publication: Describes the original generation of this antibody, and characterisation of its binding specificity.

Product Form

Size: 200 µg Purified antibody.

Purification:

Protein A affinity purified

Supplied In: PBS with 0.02% Proclin 300.

Storage Recommendation: Store at 4°C for up to 3 months. For longer storage, aliquot and store at -20°C.

Concentration: 1 mg/ml.

Important note – This product is for research use only. It is not intended for use in therapeutic or diagnostic procedures for humans or animals.