

Anti-HIV-1 GP120 [0.5B] Bulk Size Ab02051-3.0-BT

This reformatted mouse 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: Mouse IgG2b, Kappa

Clone Number: 0.5B

Alternative Name(s) of Target: Gp120; Human immunodeficiency virus 1; Envelope glycoprotein gp120

UniProt Accession Number of Target Protein:

Published Application(s): in vivo, IP, NTRL, WB, ELISA, FC

Published Species Reactivity: HIV-1

Immunogen: The original antibody was prepared by immunization of BALB/c mice, first with heat inactivated whole viruses and second with a booster dose of purified antigen i.e.

Specificity: This antibody binds an epitope between amino acid residues 308 to 331 located in the V3 loop of the HIV-1 IIIB family of viruses.

Application Notes: 0.5 Beta is a neutralizing antibody that binds the external envelope glycoprotein gp120 of the HIV-1. The binding specificity of this antibody was checked using flow cytometry. The epitope to which 0.5 beta binds has homologous sequences with inter-alpha-trypsin inhibitor (Koito et al., 1989; PMID:2484964). This antibody in conjugation with immunotoxins like ricin A chain (RAC) or pseudomonas exotoxin (PE) was used to selectively inhibit proliferation and kill HIV infected cells. The humanized version of 0.5 beta retained both the binding affinity and neutralizing activity compared to its parent murine antibody and chimeric antibody. Furthermore this antibody was used for an ELISA on a synthetic 20 amino acid peptide (308-327) based on the sequence of the RP135 region of gp120 from HIV-IIIB (Maeda et al., 1991; PMID: 1873503). This antibody was used for a western blot on HTLV-IIIB antigens (Matsushita et al., 1988; PMID:2452899), and on Purified HTLV-IIIB (Skinner et al., 1988; PMID:2456088). The NMR structure of this antibody was determined (Tugarinov et al., 2000; PMID:10801487). The ability of this antibody to neutralize a cell-free HIV infection of H9 cells was assayed. It was indeed able to prevent this infection (Matsushita et al., 1988; PMID:2452899). This antibody was also able to neutralize the HIV infection of AA-5 cells (Skinner et al., 1988; PMID:2456088). This antibody was able to prevent HIV infection in chimpanzees in vivo (Emini et al., 1992; PMID:1741059).

Antibody First Published in: Patent US5827723. [PMID:](#)

Note on publication:

Product Form

Size: 1 mg Purified antibody in bulk size.

Purification: Protein A affinity purified

Supplied In: PBS only.

Storage Recommendation: Store at 4°C for up to 3 months. Note, this antibody is provided without added preservatives, it is therefore recommended this antibody be handled under sterile conditions. 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.