

## Anti-CD4 [CE9.1 (Clenoliximab)] Standard Size Ab00450-13.0

NOT FOR THERAPEUTIC USE - This is a research-grade biosimilar. This reformatted human antibody was made using the variable domain sequences of the original Human IgG4 (primatized) format, for improved compatibility with existing reagents, assays and techniques.

**Isotype and Format:** Human IgG4, Lambda

**Clone Number:** CE9.1 (Clenoliximab)

**Alternative Name(s) of Target:** p55; T cell surface antigen T4/Leu-3.

**UniProt Accession Number of Target Protein:** P01730

**Published Application(s):** SPR, Block, ELISA, FC, IHC

**Published Species Reactivity:** chimpanzee, Human

**Immunogen:** Domain 1 of human CD4.

**Specificity:** The antibody binds to human CD4 with a K<sub>d</sub> of 1.0 nM and an ED<sub>50</sub> of 0.2 µg/ml.

**Application Notes:** The antibody binds specifically to CD4, a molecule which is part of the immunoglobulin super-family, expressed on the surface of helper T cells. The CD4 molecule acts as a co-receptor in the activation of T cells, aiding the interaction between the TCR and MHC II of the antigen-presenting cell. The antibody is classified as "primatized", as the variable regions of the light and heavy chains are obtained from primates, while the lambda light chain and gamma4 heavy chain constant domains are human. The antibody was engineered from the primatized IgG1 monoclonal antibody Keliximab by substituting two key residues. The role of the antibody as an immunosuppressor has been tested in vivo, by intravenous administration in chimpanzees and human volunteers. The antibody reached Phase II clinical trials with Biogen-Idec.

**Antibody First Published in:** Newman et al. Primatization of recombinant antibodies for immunotherapy of human diseases: a macaque/human chimeric antibody against human CD4. Biotechnology (NY). 1992 Nov;10(11):1455-60. [PMID:1369023](#)

**Note on publication:** Describes the method of producing "primatized" antibodies, where immunoglobulin genes from cynomolgus monkeys immunised with human CD4 are isolated, amplified and then cloned. The antibodies generated are against the CD4 molecule expressed on the surface of helper T cells, and are tested for both in vitro and in vivo use.

## 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.