Anti-IL-2R alpha (CD25) [Basiliximab] Standard Size Ab00188-10.3

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

NOT FOR THERAPEUTIC USE - This is a research-grade biosimilar. This is a reformatted antibody created for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human IgG1, Fc Silent™, Kappa
Clone Number: Basiliximab
Alternative Name(s) of Target: Interleukin-2 receptor subunit alpha; IL-2 receptor subunit alpha; IL-2R subunit alpha; IL-2-RA; IL2-RA; TAC antigen; p55; CD25.
UniProt Accession Number of Target Protein: P01589
Published Application(s): WB, Block, FC, IF, IHC
Published Species Reactivity: Human, Rhesus Monkey, Cynomolgus Monkey
Immunogen: Basiliximab was prepared by immunizing BALB/c mice with CTC 16 cells.
Specificity: Basiliximab recognises the human IL-2R and binds to the epitope (116)ERIYHFV(122) within the extracellular domain of the CD25 subunit – binding is abolished when 2 or more residues within the epitope are mutated. This epitope overlaps with the interaction site of CD25 and IL-2. CD25 is found in the high-affinity IL-2R (αβγc) – T cells only express CD25 upon activation. IL-2 binding to IL-2R on T cells modulates proliferation and differentiation.
Application Notes: Basiliximab is derived from the murine anti-Tac antibody. For the clinically used format, the variable regions from this antibody were grafted onto the sequence of the human IgG1κ constant regions. Basiliximab binding to CD25 competitively blocks the interaction of IL-2R with its ligand IL-2 on the surface of T cells. Blocking this interaction prevents T cell replication and T cell-mediated B cell activation. Basiliximab binding suppresses the immune system inhibits the pathway activating the cellular immune response to allograft rejection. IL-2 signalling suppression can additionally prevent acute graft-versus-host disease, autoimmune disorders and malignancies such as T cell leukemias (Binder et al, 2007). Basiliximab has also been used in FC, IF, IHC and WB studies, which enables the detection of CD25.
Antibody First Published in: Kovarik et al. Disposition of basiliximab, an interleukin-2 receptor monoclonal antibody, in recipients of mismatched cadaver renal allografts. Transplantation. 1997 Dec 27;64(12):1701-5.

PMID:9422405

Note on publication: Describes the characterization of the pharmacokinetics of the therapeutic antibody.

Product Form

Size: 200 µg Purified antibody.
Purification: Protein A affinity purified
Supplied In: PBS with 0.02% Proclin 300.
Storage Recommendation: Store at 4ºC for up to 3 months. For longer storage, aliquot and store at -20ºC.
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.