

Anti-Lymphotoxin alpha [MLTA3698A (Pateclizumab)] Standard Size Ab00773-10.0

Isotype and Format: Human IgG1, Kappa

Clone Number: MLTA3698A (Pateclizumab)

Alternative Name(s) of Target: LT α ; LT-alpha; TNF-beta; Tumor necrosis factor ligand superfamily member 1

UniProt Accession Number of Target Protein: P01374

Published Application(s): deplete, SPR, Block, FC

Published Species Reactivity: Human

Immunogen: This humanized antibody was derived from a mouse anti-human LT- α hybridoma mAb.

Specificity: This antibody is specific for lymphotoxin-alpha, and is able to bind both the soluble LT α 3 homotrimeric form and the cell-surface LT α 1 β 2 heterotrimer, which is transiently expressed on activated B and T cells (Th1, Th17).

Application Notes: This antibody has been shown to be able to both block LT α -mediated signaling and selectively deplete LT α -expressing activated T and B cells, which has therapeutic applications in abrogating proinflammatory responses in rheumatoid arthritis (RA) pathology (Kennedy, 2014). Preliminary clinical trials demonstrated that administration of this antibody decreased serum levels of CXCL13, a biomarker of RA disease activity (Emu, 2012). In a phase II trial, this antibody had a trend for clinical effects on the symptoms of RA after 3 months of treatment, but the differences from placebo responses were not statistically significant (Kennedy, 2014). In a human peripheral blood mononuclear cell transplanted SCID mouse model of graft-versus-host disease, this antibody specifically depleted activated LT α -expressing human donor T and B cells, prolonging survival of the mice (Chiang, 2012). Finally, this antibody has been used to in FC and surface plasmon resonance analysis to characterise its interaction with the LT α ligand.

Antibody First Published in: Chiang et al. In Vivo Depletion of Lymphotoxin-Alpha Expressing Lymphocytes Inhibits Xenogeneic Graft-versus-Host-Disease PLoS ONE, 2012, Vol.7(3), p.e33106

[PMID:22427961](#)

Note on publication: Describes the generation of this antibody and its use in prolonging survival in a mouse model of GVHD.

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.