

# Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten! See the following pages for more information!



### Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

## Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

#### SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic in





# Anti-Lymphotoxin alpha [3F12.2D3] Bulk Size Ab00788-10.6-BT

This is a Fab fragment with a his-tag.

This chimeric human antibody was made using the variable domain sequences of the original Mouse IgG2b format, for improved compatibility with existing reagents, assays and techniques.

Isotype and Format: Human Fab fragment, His-Tagged, Kappa

Clone Number: 3F12.2D3

Alternative Name(s) of Target: chimeric 3F12;LT; LTα3; LTα; Tumor necrosis factor beta; Tumor necrosis

factor β; Tumor necrosis factor-beta; tumor necrosis factor-β; TNF beta; TNF-beta; TNF β; TNF-β;

Lymphotoxin-alpha; Lymphotoxin alpha

UniProt Accession Number of Target Protein: P01374 Published Application(s): FC;SPR, neutralize, ELISA

Published Species Reactivity: Human

**Immunogen:** 3F12 was prepared by hyperimmunizing BALB/c mice with purified recombinant human LT $\alpha$  expressed in E. coli - the hybridoma clone was selected for its ability to bind LT $\alpha$ 3 by ELISA. The CDRs of the antibody were grafted to the framework regions of the mice mAb 2G7 to create the chimeric version of the antibody.

**Specificity:** 3F12 binds to human LT $\alpha$ 3 and LT $\alpha$  $\beta$  (with a KD of ~0.3 nM, determined by BIACORE; ~ 37 pM, determined by ELISA) in both its soluble homotrimeric and membrane heterotrimeric forms. LT $\alpha$  belongs to the tumor necrosis factor (TNF) superfamily and is secreted as a homo-trimer (LT $\alpha$ 3), or is expressed on the cell surface in complex with LT $\beta$ . Lymphotoxin is produced by lymphocytes and in its homotrimeric form binds to TNFRSF1A/TNFR1, TNFRSF1B/TNFBR and TNFRSF14/HVEM. LT $\alpha$ 3 signaling induces target cells to upregulate many chemokines and cytokines in an NFkB-dependent manner.

**Application Notes:** The properties of the chimieric 3F12 is equivalent to that of the original 3F12 mAb. 3F12 is able to bind to Th2 cells and additionally is can functionally block human LT $\alpha$ 3 versus an isotype control (trastuzumab) - LT $\alpha$ 3-induced ICAM upregulation is blocked on HUVEC (Human Umbilical Endothelial Cells) (IC50 0.04 nM) and LT $\alpha$ 3-induced IL-8 is blocked in A549 cells. The antibody has also been used in ELISA studies to detect LT-alpha and to measure binding.

**Antibody First Published in:** Catellana et al. Resurrection of a Clinical Antibody: Template ProteoGenomic de novoProteomic Sequencing and Reverse Engineering of an Anti-Lymphotoxin Alpha

Antibody Proteomics. 2011 Feb; 11(3): 395-405. PMID:21268269

**Note on publication:** Describes the generation of anti-LT antibody and compares binding specificity and affinity of the chimeric antibody against the original antibody by BIACORE and ELISA.

#### **Product Form**

Size: 1 mg Purified antibody in bulk size.

Purification: Purified by Immobilized Metal Affinity Chromatography

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 recommed 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.