

Human TIGIT (Tiragolumab)

Purified No Carrier Protein

Biosimilar Recombinant Human Monoclonal Antibody

Product Information

Product No.: T760

Clone: RG6058

Isotype: Human IgG1κ

Storage: Sterile 2 to 8°C

Product Description

Specificity:

This non-therapeutic biosimilar antibody uses the same variable region sequence as the therapeutic antibody Tiragolumab. This product is for research use only.

Tiragolumab activity is directed against human TIGIT.

Antigen Distribution:

TIGIT is expressed on activated CXCR5 + CD4 + T cells in peripheral blood, variably on CD8 + T cells and CD56 + CD3 - NK cells, and constitutively in tonsils on some CD3 + CD8 int T cells as well as the CXCR5 high /ICOS high subset of CD4 + T cells that contains fully differentiated TFH cells.

Background:

TIGIT (WUCAM) is an immunoreceptor that inhibits multiple immune cell responses, including T cell priming by dendritic cells, tumor cell killing by NK cells and cytotoxic T cells, and also enhances the immune suppressive activity of regulatory T cells¹. TIGIT is a novel member of the Ig-superfamily distantly related to Nectins and Neclns that aligns with the distal Ig-V-type domains of Nectin1-4, poliovirus receptor (PVR; CD155), DNAM-1 (CD226), and TACTILE (CD96)². TIGIT is preferentially expressed on human B helper follicular T cells and binds with high affinity to PVR under both static and flow conditions. Additionally, TIGIT, DNAM-1, and TACTILE are expressed together on T cells and NK cells and share PVR as a ligand¹. TIGIT is not detectable on the surface of resting peripheral blood mononuclear cells from healthy donors unless activated².

Tiragolumab is an investigational, fully human monoclonal antibody designed to prevent TIGIT interaction with its principal ligand CD155 (PVR; poliovirus receptor)³. Its immunotherapeutic effects are being evaluated as a single agent and in combination with the anti-PD-L1 antibody atezolizumab⁴.

Known Reactivity Species:

Human

Expression Host:

HEK-293 Cells

Format:

Purified No Carrier Protein

Immunogen:

Humanized antibody that binds TIGIT

Product Datasheet

www.leinco.com

Formulation

This biosimilar antibody is aseptically packaged and formulated in 0.01 M phosphate buffered saline (150 mM NaCl) PBS pH 7.2 - 7.4 with no carrier protein, potassium, calcium or preservatives added. Due to inherent biochemical properties of antibodies, certain products may be prone to precipitation over time. Precipitation may be removed by aseptic centrifugation and/or filtration.

Purity

≥95% by SDS Page, ≥95% monomer by analytical SEC

Endotoxin

< 1.0 EU/mg as determined by the LAL method

Storage and Stability

Functional grade preclinical antibodies may be stored sterile as received at 2-8°C for up to one month. For longer term storage, aseptically aliquot in working volumes without diluting and store at ≤ -70°C.

Avoid Repeated Freeze Thaw Cycles.

Product Preparation

Recombinant biosimilar antibodies are manufactured in an animal free facility using only in vitro protein free cell culture techniques and are purified by a multi-step process including the use of protein A or G to assure extremely low levels of endotoxins, leachable protein A or aggregates.

Pathogen Testing

To protect mouse colonies from infection by pathogens and to assure that experimental preclinical data is not affected by such pathogens, all of Leinco's recombinant biosimilar antibodies are tested and guaranteed to be negative for all pathogens in the IDEXX IMPACT I Mouse Profile.

Other Applications Reported in Literature:

ELISA,

WB

Country of Origin

USA

References

- 1) Harjunpää H, Guillerey C. Clin Exp Immunol. 200(2):108-119. 2020.
- 2) Boles KS, Vermi W, Facchetti F, et al. Eur J Immunol. 39(3):695-703. 2009.
- 3) Chiang EY, Mellman I. J Immunother Cancer. 10(4):e004711. 2022.
- 4) Brazel D, Ou SI, Nagasaka M. Lung Cancer (Auckl). 14:1-9. 2023.
- 5) Cho BC, Abreu DR, Hussein M, et al. Lancet Oncol. 23(6):781-792. 2022.