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Human CD194 (CCR4) (Mogamulizumab) Antibody

Biosimilar Recombinant Human Monoclonal Antibody

Product Information

Product No.:	LT1000
Clone:	KW-0761
RRID:	AB_2893874
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 Mogamulizumab. Clone KW-0761 recognizes human CD194 (CCR4). This product is for research use only.

Antigen Distribution:
CCR4 is expressed on a variety of cell types: T lymphocytes (Th2, Th17, and regulatory T cells), platelets, NK cells, monocytes, macrophages, dendritic cells, neurons, microglia, and astroglia.1 Expression of CCR4 is increased on leukemic cells in cutaneous T-cell lymphoma (CTCL).2

Background:
Clone KW-0761 (Mogamulizumab) is a research-grade, humanized monoclonal antibody generated from mouse anti-CCR4 mAb7 that targets human CCR4.1 CC chemokine receptor type 4 (CCR4) is a protein that belongs to the G protein-coupled receptor family and is a receptor for a variety of CC chemokines including MCP-1, MIP-1, RANTES, TARC, and Macrophage-derived chemokine. Chemokines are involved in the development, homeostasis, and function of the immune system and are known to regulate cell trafficking of various types of leukocytes. In a 2018 Phase I clinical trial, Mogamulizumab was found to decrease the number of HTLV-1–infected cells and the levels of inflammatory markers related to HTLV-1–Associated Myelopathy.3

Known Reactivity Species:
Human

Expression Host:
HEK-293 Cells

Format:
Purified No Carrier Protein

Immunogen:
Humanization of mouse anti-CCR4 mAb7.

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

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Storage and Stability
Functional grade preclinical antibodies may be stored sterile as received at 2° to 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,
FA,
FC,
IP,
WB

Country of Origin
USA

References
1) Nicolay, J. et al. (2021) Eur J Immunol. 51(7):1660-1671.
2) Bogacka, J. et al. (2022) Int J Mol Sci.. 23(24):15638.
3) Yamamoto, K. et al. (2010) J Clin Oncol. 28(9):1591-8.
4) Mimura, Y. et al. (2018) Protein Cell 9(1):47-62.
5) Yamano, Y. et al. (2018) N Engl J Med 378 (6), 529-538.