Leinco Technologies, Inc.
excellence in early discovery research™

Human CD20 (Ocrelizumab) Antibody

Purified No Carrier Protein

Biosimilar Recombinant Human Monoclonal Antibody

Product Information

Product No.:	C3150
Clone:	RG-1594
Isotype:	Human IgG1κ
Storage:	Sterile 2-8°C

Product Description

Specificity:
This non-therapeutic biosimilar antibody uses the same variable region sequence as the therapeutic antibody Girentuximab. Ocrelizumab (RG-1594) specifically targets the CD20 antigen on B cells.

Antigen Distribution:
CD20 is primarily expressed on the surface of B lymphocytes, including both normal and malignant B-cells.

Background:
CD20 is a transmembrane protein that is prominently present on the surface of B-cells from the early to mature stages, but notably absent on hematopoietic stem cells, pro-B cells, or plasma cells. Its significance lies in its role in B-cell functions such as activation and differentiation. It is a key target for monoclonal antibodies used in the treatment of B-cell- related diseases and autoimmune conditions. Monoclonal antibodies targeting CD20 have been widely used to treat B-cell lymphomas, leukemias, and autoimmune diseases like rheumatoid arthritis and systemic lupus erythematosus. These antibodies work by selectively targeting and depleting B-cells that express CD20, thereby modulating the immune response and reducing inflammation. This targeted approach has shown promising results in managing various B-cell disorders and has significantly improved the prognosis for patients with these conditions[1,2].

RG 1594, also known as ocrelizumab, is a humanized monoclonal antibody that targets CD20, a protein found on the surface of B cells. By binding to CD20, ocrelizumab helps in the depletion of B cells, which are believed to play a role in the development of sclerosis. This therapeutic approach has been found to be effective in reducing the progression of disability and lowering the frequency of relapses in patients with multiple sclerosis (MS)[3-8].

Known Reactivity Species:
Human

Expression Host:
HEK-293 Cells

Format:
Purified No Carrier Protein

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 2-8°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,
LC-MS/MS,
N

Country of Origin
USA

References
1. Dabkowska A, Domka K, Firczuk M. Front Immunol. 2024;15:1363102.
2. Shan D, Ledbetter JA, Press OW. Blood. 1998;91(5):1644-1652.
3. Martins P, Vandewalle B, Félix J, et al. Pharmacoecon Open. 2023;7(2):229-241.
4. Montalban X, Matthews PM, Simpson A, et al. Ann Clin Transl Neurol. 2023;10(3):302-311.
5. Wolinsky JS, Engmann NJ, Pei J, Pradhan A, Markowitz C, Fox EJ. Mult Scler J Exp Transl Clin. 2020;6(1):2055217320911939.
6. Syed YY. CNS Drugs. 2018;32(9):883-890.
7. Juanatey A, Blanco-Garcia L, Tellez N. Rev Neurol. 2018;66(12):423-433.
8. Auguste P, Colquitt J, Connock M, et al. Pharmacoeconomics. 2020;38(6):527-536.
9. Passot C, Desvignes C, Ternant D, et al. Bioanalysis. 2017;9(16):1227-1235.
10. Hallin EI, Trætteberg Serkland T, Myhr KM, Torkildsen Ø, Skrede S. J Mass Spectrom Adv Clin Lab. 2022;25:53-60.
11. Nguyen V, Cheung A, Hendricks R, Peng K, Chung S. AAPS J. 2023;25(6):97.

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