

Anti-Human CD307e (FcRL5) Purified *in vivo* PLATINUM™ Functional Grade Monoclonal Antibody

Product Information

Product No.: I-2100
Clone: 509F6
RRID: AB_2893833
Isotype: Mouse IgG2a k
Storage: Sterile 2-8°C

Product Description

Specificity:

Clone 50946 recognizes human FcRL5 within the first 3 Ig domains. Clone 50946 does not cross-react with FcRL4.

Antigen Distribution:

FcRL5 is expressed on mature B cells and plasma cells.

Background:

FcRL5 antibody, 509F6, recognizes Fc receptor-like 5 (FcRL5), also known as immunoglobulin superfamily receptor translocation associated 2 (IRTA2), Fc receptor homolog 5 (FcRH5), and BXMAS1. FcRL5 is a 106 kDa type I transmembrane glycoprotein containing 9 Ig-like extracellular domains, a cytoplasmic ITAM-like consensus sequence, and two cytoplasmic ITIM-like sequences¹. FcRL5 is found on most mature B cells, with the highest levels on naive and memory B cells and plasma cells^{1,2}. FcRL5 is an IgG receptor and binds to all IgG isotypes³, resulting in the inhibition of BCR signaling through the recruitment of SH2 domain-containing tyrosine phosphatase 1 (SHP-1) after tyrosine phosphorylation of its two ITIMs⁴. B cell malignancies, including multiple myeloma, chronic lymphocytic leukemia, mantle cell lymphoma, and hairy cell leukemia, often exhibit aberrant FCRL5 expression, indicating FcRL5 as a potential biomarker or therapeutic target⁵⁻⁷.

Known Reactivity Species:

Human

Format:

Purified *in vivo* Functional Grade, *in vivo* PLATINUM™

Immunogen:

Cells transfected with Human FcRL5.

Formulation

This monoclonal 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

≥98% monomer by analytical SEC, >95% by SDS Page

Endotoxin

≤ 0.5 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

Functional grade preclinical antibodies are manufactured in an animal free facility using *in vitro* 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.

Products are for research use only. Not for use in diagnostic or therapeutic procedures.

Product Datasheet

www.leinco.com



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 Purified Functional PLATINUM™ antibodies are tested and guaranteed to be negative for all pathogens in the IDEXX IMPACT I Mouse Profile.

Applications

Applications and Recommended Usage (Quality Tested By Leinco):

FC The suggested concentration for this CD307e antibody for staining cells in flow cytometry is $\leq 0.125 \mu\text{g}$ per 10^6 cells in a volume of 100 μl . Titration of the reagent is recommended for optimal performance for each application.

Other Applications Reported in Literature:

B IP

Country of Origin

USA

References

1. M. D. Cooper., et al. (2001). Proc. Natl. Acad. Sci. USA 98: 9772–9777
2. Koeppen H., et al. (2006) Int Immunol. 18:1363-1373
3. Colonna M., et al. (2012) J Immunol. 188(10):4741-5

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