

CD161

Purified Mouse Monoclonal Antibody Catalog # AO2744a

Specification

CD161 - Product Information

Application E, WB, FCM **Primary Accession** 012918 Reactivity Human Host Mouse Clonality **Monoclonal** Mouse IgG2b Isotype Calculated MW 25.4kDa KDa Immunogen Purified recombinant fragment of human CD161 (AA: extra 67-225) expressed in E. Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

CD161 - Additional Information

Gene ID 3820

Other Names KLRB1; NKR; CLEC5B; NKR-P1; NKRP1A; NKR-P1A; hNKR-P1A

Dilution E~~ 1/10000 WB~~ 1/500 - 1/2000 FCM~~1/200 - 1/400

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions CD161 is for research use only and not for use in diagnostic or therapeutic procedures.

CD161 - Protein Information

Name KLRB1

Synonyms CLEC5B, NKRP1A

Function

Plays an inhibitory role on natural killer (NK) cells cytotoxicity. Activation results in specific acid sphingomyelinase/SMPD1 stimulation with subsequent marked elevation of intracellular ceramide.



Activation also leads to AKT1/PKB and RPS6KA1/RSK1 kinases stimulation as well as markedly enhanced T-cell proliferation induced by anti-CD3. Acts as a lectin that binds to the terminal carbohydrate Gal-alpha(1,3)Gal epitope as well as to the N- acetyllactosamine epitope. Binds also to CLEC2D/LLT1 as a ligand and inhibits NK cell-mediated cytotoxicity as well as interferon-gamma secretion in target cells.

Cellular Location

Membrane; Single-pass type II membrane protein

Tissue Location

Expressed in a subset of NK cells predominantly in intestinal epithelium and liver. Detected in peripheral blood T-cells and preferentially in adult T-cells with a memory antigenic phenotype

CD161 - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>
- CD161 Images

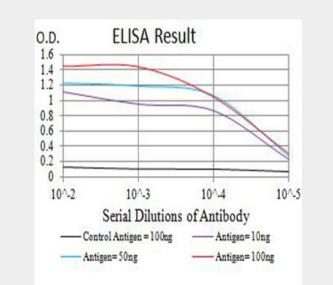


Figure 1:Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



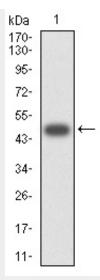


Figure 2:Western blot analysis using CD161 mAb against human CD161 (AA: extra 67-225) recombinant protein. (Expected MW is 48.4 kDa)

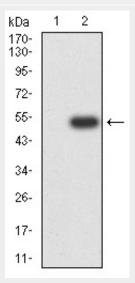


Figure 3:Western blot analysis using CD161 mAb against HEK293 (1) and CD161 (AA: extra 67-225)-hlgGFc transfected HEK293 (2) cell lysate.

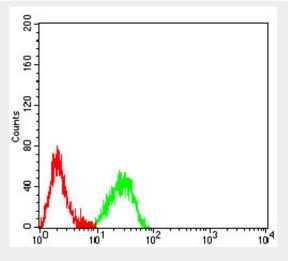


Figure 4:Flow cytometric analysis of Raji cells using CD161 mouse mAb (green) and negative



control (red).

CD161 - References

1.Biol Blood Marrow Transplant. 2015 Mar;21(3):421-8.2.Cell Immunol. 2011;269(2):74-7.