

CD319

Purified Mouse Monoclonal Antibody Catalog # AO2746a

Specification

CD319 - Product Information

Application WB, IHC, ICC, E **Primary Accession O9NO25** Reactivity Human Host Mouse Clonality **Monoclonal** Isotype Mouse IgG1 Calculated MW 37.4kDa KDa Immunogen Purified recombinant fragment of human CD319 (AA: extra 23-226) expressed in E. Coli.

Formulation Purified antibody in PBS with 0.05% sodium azide

CD319 - Additional Information

Gene ID 57823

Other Names SLAMF7; 19A; CS1; CRACC

Dilution WB~~ 1/500 - 1/2000 IHC~~ 1/200 - 1/1000 ICC~~N/A E~~ 1/10000

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 CD319 is for research use only and not for use in diagnostic or therapeutic procedures.

CD319 - Protein Information

Name SLAMF7

Synonyms CS1

Function

Self-ligand receptor of the signaling lymphocytic activation molecule (SLAM) family. SLAM



receptors triggered by homo- or heterotypic cell-cell interactions are modulating the activation and differentiation of a wide variety of immune cells and thus are involved in the regulation and interconnection of both innate and adaptive immune response. Activities are controlled by presence or absence of small cytoplasmic adapter proteins, SH2D1A/SAP and/or SH2D1B/EAT-2. Isoform 1 mediates NK cell activation through a SH2D1A-independent extracellular signal-regulated ERK-mediated pathway (PubMed:11698418). Positively regulates NK cell functions by a mechanism dependent on phosphorylated SH2D1B. Downstream signaling implicates PLCG1, PLCG2 and PI3K (PubMed:16339536). In addition to heterotypic NK cells-target cells interactions also homotypic interactions between NK cells may contribute to activation. However, in the absence of SH2D1B, inhibits NK cell function. Also acts inhibitory in T-cells (By similarity). May play a role in lymphocyte adhesion (PubMed:11802771). In LPS-activated monocytes negatively regulates production of pro-inflammatory cytokines (PubMed:23695528).

Cellular Location

Membrane; Single-pass type I membrane protein.

Tissue Location

Expressed in spleen, lymph node, peripheral blood leukocytes, bone marrow, small intestine, stomach, appendix, lung and trachea. Expression was detected in NK cells, activated B-cells, NK-cell line but not in promyelocytic, B-, or T-cell lines. Expressed in monocytes. Isoform 3 is expressed at much lower level than isoform 1

CD319 - Protocols

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

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

CD319 - 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 CD319 mAb against human CD319 (AA: extra 23-226) recombinant protein. (Expected MW is 48.3 kDa)





Figure 3:Western blot analysis using CD319 mAb against HEK293 (1) and CD319 (AA: extra 23-226)-hlgGFc transfected HEK293 (2) cell lysate.



Figure 4:Flow cytometric analysis of Raji cells using CD319 mouse mAb (green) and negative control (red).



Figure 5:Immunohistochemical analysis of paraffin-embedded tonsil tissues using CD319 mouse mAb with DAB staining.



1/200 - 1/1000

CD319 - References

1.Arthritis Res Ther. 2013;15(6):R207.2.Inflamm Res. 2013 Aug;62(8):765-72.