

Mouse anti CD158a Monoclonal Antibody

Alternative Name(s): NKAT; NKAT1; p58.1; CD158A; KIR221; NKAT-1; KIR-K64; KIR2DL1

Order Information

Description: CD158a
Catalogue: 605-140
Lot: See label
Size: 100ug/200ul
Host: Mouse
Clone: HP-3E4
Application: IHC(P), FC

• Reactivity: Hu

ANTIGEN PREPARATION

A recombinant protein of human CD158a

BACKGROUND

CD158a is 58 kDa protein, also known as KIR2DL1. Killer cell immunoglobulin-like receptors (KIRs) are transmembrane glycoproteins expressed by natural killer cells and subsets of T cells. The KIR genes are polymorphic and highly homologous and they are found in a cluster on chromosome 19q13.4 within the 1 Mb leukocyte receptor complex (LRC). The gene content of the KIR gene cluster varies among haplotypes, although several "framework" genes are found in all haplotypes (KIR3DL3, KIR3DP1, KIR3DL4, KIR3DL2). The KIR proteins are classified by the number of extracellular immunoglobulin domains (2D or 3D) and by whether they have a long (L) or short (S) cytoplasmic domain. KIR proteins with the long cytoplasmic domain transduce inhibitory signals upon ligand binding via an immune tyrosine-based inhibitory motif (ITIM), while KIR proteins with the short cytoplasmic domain lack the ITIM motif and instead associate with the TYRO protein tyrosine kinase binding protein to transduce activating signals. The ligands for several KIR proteins are subsets of HLA class I molecules; thus, KIR proteins are thought to play an important role in regulation of the immune response.

Evidence suggests that KIR genes are associated with Type 1 diabetes mellitus (T1DM). KIR2DL1 and 2DS1 polymorphism might be a potential protective factor for T1DM in the specific ethnicity.

PURIFICATION

The mouse IgG is purified by Protein A-Affinity Chromatography according to Isotyping

FORMULATION

This affinity purified antibody is supplied in sterile Phosphatebuffered saline (pH7.2) containing antibody stabilizer

SPECIFICITY

This antibody recognizes human CD158a protein. The other species are not tested.

STORAGE

The antibodies are stable for 24 months from date of receipt when stored at -20oC to -70oC. The antibodies can be stored at 2oC-8oC for three month without detectable loss of activity. Avoid repeated freezing-thawing cycles.

APPLICATIONS/SUGGESTED WORKING DILUTIONS*

- Western Blot: 0.1-1 μg/ml
- ELISA: 0.01-0.1 μg/ml
- Immunoprecipitation: 2-5 µg/ml
- IHC: 2-10 µg/ml
- Flow cytometry: 0.5-5 µg/106 cells
- Molecular Weight: 40.0
- Positive Control: Kidney Tissue

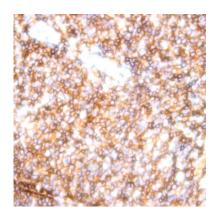
FOR RESEARCH USE ONLY.



• Cellular Location: Cell Membrane

*Optimal dilutions should be determined by researchers for the specific applications.





Immunohistochemistry: Human Tonsil (FFPE) stained with Mouse anti-CD158a (Cat# 605-140) at 1:200 for 10 min @ RT. Staining of formalin-fixed tissue requires boiling tissue sections in 10 mM Citrate Buffer, pH 6.0 for 10 min followed by cooling at RT for 20 min.

REFERENCES