Anti-CD57 Antibody [PD00-21]

IRS027



Product Type: Recombinant Mouse monoclonal IgG1, primary antibodies

Species reactivity: Human
Applications: mIHC

Molecular Wt: Predicted band size: 38 kDa

Clone number: PD00-21

Description: Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase 1 (B3GAT1) is an

enzyme that in humans is encoded by the B3GAT1 gene, whose enzymatic activity creates the CD57 epitope on other cell surface proteins. In immunology, the CD57 antigen (CD stands for cluster of differentiation) is also known as HNK1 (human natural killer-1) or LEU7. It is expressed as a carbohydrate epitope that contains a sulfoglucuronyl residue in several adhesion molecules of the nervous system. The protein encoded by this gene is a member of the glucuronyltransferase gene family. These enzymes exhibit strict acceptor specificity, recognizing nonreducing terminal sugars and their anomeric linkages. This gene product functions as the key enzyme in a glucuronyl transfer reaction during the biosynthesis of the carbohydrate epitope HNK-1 (human natural killer-1, also known as CD57 and LEU7). Alternate transcriptional splice variants have been characterized. In anatomical pathology, CD57 (immunostaining) is similar to CD56 for use in differentiating neuroendocrine tumors from others. There is an increase in the number of circulating CD57 positive cells in the blood of patients who have recently undergone organ or tissue transplants, especially of the

bone marrow, and in patients with HIV.

Immunogen: Synthetic peptide.

Positive control: Human tonsils tissue, human spleen tissue.

Subcellular location: Golgi apparatus membrane, Secreted, Endoplasmic reticulum membrane.

Recommended Dilutions:

mIHC 1:100

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at $+4^{\circ}$ C after thawing. Aliquot store at -20° C or -80° C. Avoid repeated freeze / thaw

cycles.

Purity: Protein A affinity purified.

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Images

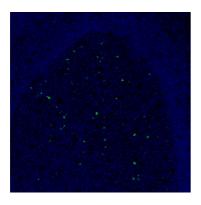


Fig1: mIHC analysis of human tonsils tissue (Formalin/PFA-fixed paraffin-embedded sections) with Mouse anti-CD57 antibody (IRS027) at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95°C. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

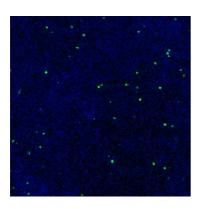


Fig2: mIHC analysis of human spleen tissue (Formalin/PFA-fixed paraffin-embedded sections) with Mouse anti-CD57 antibody (IRS027) at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95℃. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

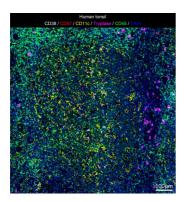


Fig3: mIHC analysis of human tonsil tissue (Formalin/PFA-fixed paraffin-embedded sections) with CD38 (IRS006), CD57 (IRS027), CD11c (IRS001), Tryptase (IRS041) and CD45 (IRS025) antibody at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95℃. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

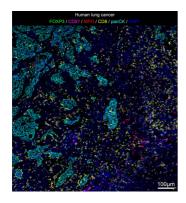


Fig4: mIHC analysis of human lung cancer tissue (Formalin/PFAfixed paraffin-embedded sections) with FOXP3 (IRS008), CD57 (IRS027), MPO (IRS037), CD8 (IRS007) and panCK (IRS010) antibody at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95℃. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

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Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

- 1. Górska A. et. al. The Role of TRAF4 and B3GAT1 Gene Expression in the Food Hypersensitivity and Insect Venom Allergy in Mastocytosis. Arch Immunol Ther Exp (Warsz). 2016 Dec
- 2. Huffman JE. et. al. Polymorphisms in B3GAT1, SLC9A9 and MGAT5 are associated with variation within the human plasma N-glycome of 3533 European adults. Hum Mol Genet. 2011 Dec