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Anti-CD177 Antibody

Catalog # AP95731

Product Information

Application	WB, FC
Primary Accession	Q8N6Q3
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Calculated MW	46363

Additional Information

Gene ID	57126
Other Names	NB1; PRV1; CD177 antigen; Human neutrophil alloantigen 2a; HNA-2a; NB1 glycoprotein; NB1 GP; Polycythemia rubra vera protein 1; PRV-1; CD177
Target/Specificity	Recombinant fusion protein of human CD177 expressed in E. Coli
Dilution	WB~~WB (1/500 - 1/1000) FC~~FC (1/100 - 1/200)
Format	Mouse IgG2b. Liquid in PBS, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

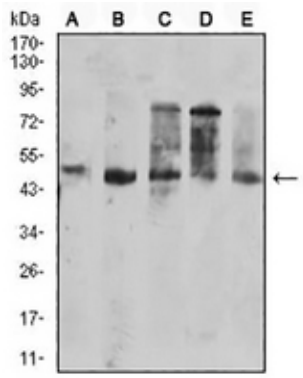
Name	CD177 (HGNC:30072)
Function	In association with beta-2 integrin heterodimer ITGAM/CD11b and ITGB2/CD18, mediates activation of TNF primed neutrophils including degranulation and superoxide production (PubMed:21193407). In addition, by preventing beta-2 integrin internalization and attenuating chemokine signaling favors adhesion over migration (PubMed:28807980). Heterophilic interaction with PECAM1 on endothelial cells plays a role in neutrophil transendothelial migration in vitro (PubMed:17580308). However, appears to be dispensable for neutrophil recruitment caused by bacterial infection in vivo (PubMed:23461681). Acts as a receptor for the mature form of protease PRTN3 allowing its display at the cell surface of neutrophils (PubMed:17244676, PubMed:18462208). By displaying PRTN3 at the neutrophil cell surface, may play a role in enhancing endothelial cell junctional integrity and thus vascular integrity during neutrophil diapedesis (PubMed:23202369).
Cellular Location	Cell membrane; Lipid-anchor, GPI-anchor. Membrane raft; Lipid-anchor, GPI-like-anchor. Secreted. Cytoplasmic granule membrane. Cell projection,

lamellipodium. Note=Cell surface expression on neutrophils is increased upon TNF, fMLP or CXCL8/IL8- mediated stimulation (PubMed:17244676, PubMed:17580308). In neutrophils, stored predominantly in secondary and tertiary granules (PubMed:18462208). Can also be shedded from the cell membrane (PubMed:12239154, PubMed:18462208). Localizes to lamellar protrusions in spreading neutrophils (PubMed:28807980)

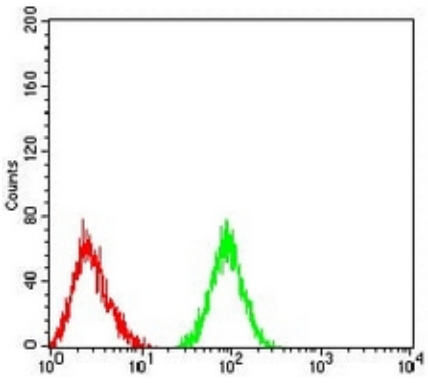
Tissue Location

Highly expressed in normal bone marrow and weakly expressed in fetal liver (PubMed:10753836). During neutrophil differentiation, expression begins at the metamyelocyte stage and continues throughout the subsequent stages (at protein level) (PubMed:17244676, PubMed:18462208, PubMed:24926686). Expressed by a subset of mature neutrophils (at protein level) (PubMed:10753836, PubMed:12377969, PubMed:12675722, PubMed:17244676, PubMed:17580308, PubMed:18462208, PubMed:21193407, PubMed:24926686, PubMed:27227454, PubMed:28240246, PubMed:28807980). The percentage of neutrophils expressing CD177 varies across the population (PubMed:17244676, PubMed:27227454). Expressed in granulocytes of patients with polycythemia vera (PV) and with essential thrombocythemia (ET) (PubMed:10753836, PubMed:12377969).

Images



Western blot analysis of CD177 expression in SPCA1 (A), SKMES1 (B), HepG2 (C), HL60 (D), PC3 (E) whole cell lysates. (Predicted band size: 46 kD; Observed band size: 46 kD)



Flow cytometric analysis of HL60 cells using Anti-CD177 Antibody (green) and negative control (red).