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CD177 Polyclonal Antibody

Catalog # AP73466

Product Information

Application	WB, IHC-P
Primary Accession	Q8N6Q3
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46363

Additional Information

Gene ID	57126
Other Names	CD177; NB1; PRV1; CD177 antigen; Human neutrophil alloantigen 2a; HNA-2a; NB1 glycoprotein; NB1 GP; Polycythemia rubra vera protein 1; PRV-1; CD177
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-300 ELISA: 1/20000. Not yet tested in other applications.
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

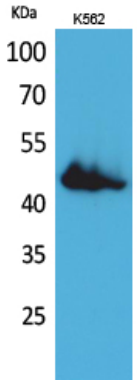
Name	CD177 (HGNC:30072)
Function	In association with beta-2 integrin heterodimer ITGAM/CD11b and ITGB2/CD18, mediates activation of TNF-alpha primed neutrophils including degranulation and superoxide production (PubMed:21193407). In addition, by preventing beta-2 integrin internalization and attenuating 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-alpha, 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).

Background

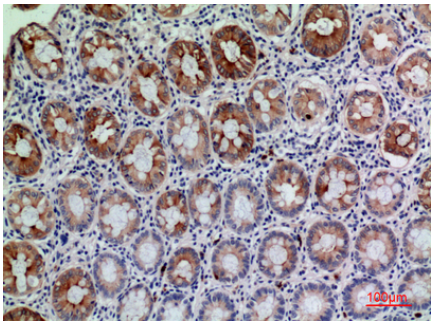
In association with beta-2 integrin heterodimer ITGAM/CD11b and ITGB2/CD18, mediates activation of TNF-alpha primed neutrophils including degranulation and superoxide production (PubMed:21193407). In addition, by preventing beta-2 integrin internalization and attenuating chemokine signaling favors adhesion 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).

Images



Western Blot analysis of K562 cells using CD177 Polyclonal Antibody.. Secondary antibody was diluted at 1:20000

Immunohistochemical analysis of paraffin-embedded human-colon, antibody was diluted at 1:100



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