



CD177 Monoclonal Antibody

Catalog No	YP-mAb-14010
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	CD177
Protein Name	CD177 antigen
Immunogen	The antiserum was produced against synthesized peptide derived from the Internal region of human CD177. AA range:361-410
Specificity	CD177 Monoclonal Antibody detects endogenous levels of CD177 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	CD177; NB1; PRV1; CD177 antigen; Human neutrophil alloantigen 2a; HNA-2a; NB1 glycoprotein; NB1 GP; Polycythemia rubra vera protein 1; PRV-1; CD177
Observed Band	46kD
Cell Pathway	Cell membrane ; Lipid-anchor, GPI-anchor . Membrane raft ; Lipid-anchor, GPI-like-anchor . Secreted . Cytoplasmic granule membrane . Cell projection, lamellipodium . 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 Specificity	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:28240246, PubMed:12377969, PubMed:18462208, PubMed:12675722, PubMed:17244676, PubMed:17580308, PubMed:21193407, PubMed:24926686, PubMed:28807980, PubMed:27227454). 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).

Function

induction:By CSF3 in resting granulocytes. Induced in patients with polycythemia vera (PV) and with essential thrombocythemia (ET).,mass spectrometry: PubMed:11465086,polymorphism:There is a significant association between the variants Ala-3, Leu-251 and Thr-348 and a low expression of CD177 on neutrophils.,PTM:A soluble form may also be produced by proteolytic cleavage at the cell surface (shedding).,PTM:N-glycosylated.,similarity:Contains 2 UPAR/Ly6 domains.,tissue specificity:Highly expressed in normal bone marrow and weakly expressed in fetal liver. Expressed on neutrophils. Expressed in granulocytes of patients with polycythemia vera (PV) and with essential thrombocythemia (ET).,

Background

This gene encodes a glycosyl-phosphatidylinositol (GPI)-linked cell surface glycoprotein that plays a role in neutrophil activation. The protein can bind platelet endothelial cell adhesion molecule-1 and function in neutrophil transmigration. Mutations in this gene are associated with myeloproliferative diseases. Over-expression of this gene has been found in patients with polycythemia rubra vera. Autoantibodies against the protein may result in pulmonary transfusion reactions, and it may be involved in Wegener's granulomatosis. A related pseudogene, which is adjacent to this gene on chromosome 19, has been identified. [provided by RefSeq, Apr 2014],

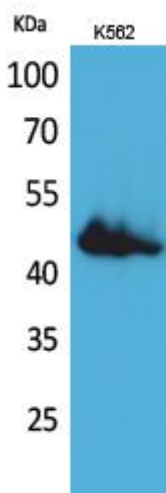
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using CD177 Monoclonal Antibody