

NB1 Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP9443b**Specification**

NB1 Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [Q8N6Q3](#)**NB1 Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 57126**Other Names**

CD177 antigen, Human neutrophil alloantigen 2a, HNA-2a, NB1 glycoprotein, NB1 GP, Polycythemia rubra vera protein 1, PRV-1, CD177, CD177, NB1, PRV1

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NB1 Antibody (C-term) Blocking Peptide - 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 shed 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: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).

NB1 Antibody (C-term) Blocking Peptide - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

NB1 Antibody (C-term) Blocking Peptide - Images**NB1 Antibody (C-term) Blocking Peptide - Background**

NB1, a glycosyl-phosphatidylinositol (GPI)-linked N-glycosylated cell surface glycoprotein, was first described in a case of neonatal alloimmune neutropenia.

NB1 Antibody (C-term) Blocking Peptide - References

Melis, S., et al. Acta Clin Belg 64(5):429-433(2009)Hu, N., et al. Autoimmun Rev 8(6):510-514(2009)Korkmaz, B., et al. J. Biol. Chem. 283(51):35976-35982(2008)Han, T.H., et al. Korean J Lab Med 26(2):114-118(2006)Kissel, K., et al. Eur. J. Immunol. 31(5):1301-1309(2001)Temerinac, S., et al. Blood 95(8):2569-2576(2000)