

Datasheet for ABIN967682

anti-MPL antibody (Extracellular Domain)**2** Images**4** Publications[Go to Product page](#)

Overview

Quantity:	0.1 mg
Target:	MPL
Binding Specificity:	Extracellular Domain
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This MPL antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS)

Product Details

Brand:	BD Pharmingen™
Immunogen:	Human c-Mpl extracellular domain
Clone:	1-78-1
Isotype:	IgG1 kappa
Characteristics:	<ol style="list-style-type: none">1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.2. Please refer to us for technical protocols.3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

Target Details

Target:	MPL
Alternative Name:	CD110 (MPL Products)
Background:	<p>The 1.78.1 monoclonal antibody specifically binds to the human Thrombopoietin Receptor (TPO-R) that is also known as the Myeloproliferative leukemia protein (c-Mpl) or CD110. CD110 is a type I transmembrane protein and a member of the hematopoietin receptor family. It is expressed on hematopoietic stem cells, a subfraction of hematopoietic precursor cells, cells of the megakaryocytic lineage and platelets. CD110 serves as a receptor for thrombopoietin. Upon binding of thrombopoietin to CD110, megakaryocyte proliferation and differentiation is induced and stem cells are protected from apoptosis.</p> <p>Synonyms: C-MPL, MPL, MPLV, TPOR, Thrombopoietin receptor</p>
Molecular Weight:	65-72 kDa (HEL cells) and 80-90 kDa (Platelets)
Pathways:	JAK-STAT Signaling

Application Details

Comment:	Related Products: ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	0.5 mg/mL
Buffer:	Aqueous buffered solution containing ≤ 0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C
Storage Comment:	Store undiluted at 4°C.

Publications

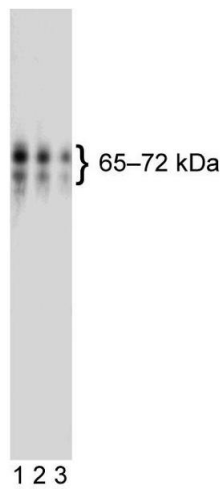
Product cited in:	Abbott, Huang, Ellison, Chen, Arora, Szilvassy, Wei: "Mouse monoclonal antibodies against human c-Mpl and characterization for flow cytometry applications." in: Hybridoma (2005) , Vol. 29, Issue 2, pp. 103-13, (2010) (PubMed).
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Deng, Banu, Malloy, Hass, Wang, Cavacini, Eaton, Avraham: "An agonist murine monoclonal antibody to the human c-Mpl receptor stimulates megakaryocytopoiesis." in: **Blood**, Vol. 92, Issue 6, pp. 1981-8, (1998) ([PubMed](#)).

Gotoh, Ritchie, Takahira, Broxmeyer: "Thrombopoietin and erythropoietin activate inside-out signaling of integrin and enhance adhesion to immobilized fibronectin in human growth-factor-dependent hematopoietic cells." in: **Annals of hematology**, Vol. 75, Issue 5-6, pp. 207-13, (1998) ([PubMed](#)).

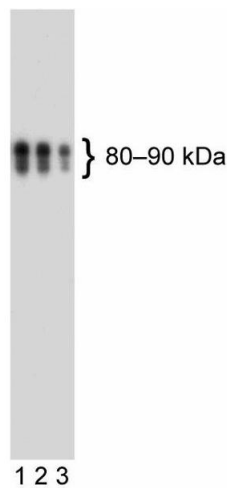
Broudy, Lin, Fox, Taga, Saito, Kaushansky: "Thrombopoietin stimulates colony-forming unit-megakaryocyte proliferation and megakaryocyte maturation independently of cytokines that signal through the gp130 receptor subunit." in: **Blood**, Vol. 88, Issue 6, pp. 2026-32, (1996) ([PubMed](#)).

Images



Western Blotting

Image 1. Western blot analysis of human CD110 (Thrombopoietin receptor) expressed by human HEL92.1.7 cells and platelets. Lysates prepared from human HEL92.1.7 cells and platelets were SDS-PAGE electrophoresed and transferred to membranes. They were then probed using Purified Mouse Anti-Human CD110 antibody (ABIN967682) at concentrations of 0.25 (lane 1), 0.125 (lane 2) and 0.06 (lane 3) myg/ml. CD110 is identified as approximately 65-72 kDa bands from HEL cells (first panel) and 80-90 kDa bands from platelets (second panel). The molecular masses observed for the Thrombopoietin Receptor protein using the 1.78.1 antibody for Western blotting may vary due to splice variations and/or different post-translational modifications of the receptor obtained from different cell types.



Western Blotting

Image 2. Western blot analysis of human CD110