



Syrian Hamster Anti-Mouse Podoplanin (gp38) Monoclonal antibody, clone 8.1.1 (CABT-L4294)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview

The 8.1.1 monoclonal antibody reacts with mouse podoplanin (PDPN) also known as glycoprotein 38 (gp38). Podoplanin is a 36 to 43 kDa mucin-type glycoprotein expressed by kidney glomerular epithelial cells (podocytes), lymphatic endothelial cells, and fibroblastic reticular cells. Podoplanin is the endogenous ligand for the C-type lectin receptor CLEC-2, which is expressed by platelets and DCs. CLEC-2 signaling is critical for platelet activation, the migration of activated DCs to draining lymph nodes, and maintenance of vascular integrity and lymph node structure. Podoplanin is critical for fibroblastic reticular cell contractility as well as during fetal development for blood-lymph separation and lung organogenesis. Podoplanin overexpression in cancer correlates with increased invasion and metastasis. The 8.1.1 antibody has been shown to block podoplanin in vivo and in vitro.

Target	Mouse Podoplanin (gp38)
Immunogen	Mouse tymic epithelial cells
Isotype	IgG
Source/Host	Syrian Hamster
Species Reactivity	Mouse
Clone	8.1.1
Purification	Protein A purified. Purity>95%. Determined by SDS-PAGE
Conjugate	Functional Grade
Applications	in vivo PDPN blockade, in vitro PDPN blockade, IF, WB, FC

Molecular Weight	150 kDa
Format	0.2 µM filtered liquid. Purified from tissue culture supernatant in an animal free facility
Concentration	Lot specific
Size	5 mg
Buffer	PBS, pH 7.0. Contains no stabilizers or preservatives. [low endotoxin azide-free] Endotoxin level: <2EU/mg (<0.002EU/µg). Determined by LAL gel clotting assay Related dilution buffer: CABT-LB04
Preservative	None
Storage	The antibody solution should be stored undiluted at 4°C, and protected from prolonged exposure to light. Do not freeze.
Ship	Wet ice

BACKGROUND

Introduction	This gene encodes a type-I integral membrane glycoprotein with diverse distribution in human tissues. The physiological function of this protein may be related to its mucin-type character. The homologous protein in other species has been described as a differentiation antigen and influenza-virus receptor. The specific function of this protein has not been determined but it has been proposed as a marker of lung injury. Alternatively spliced transcript variants encoding different isoforms have been identified. [provided by RefSeq, Jul 2008]
Keywords	PDPN;podoplanin;T1A;GP36;GP40;Gp38;OTS8;T1A2;TI1A;T1A-2;AGGRUS;HT1A-1;PA2.26;T1-alpha;hT1alpha-1;hT1alpha-2;PA2.26 antigen;glycoprotein 36;glycoprotein, 36-KD;lung type I cell membrane associated glycoprotein;lung type-I cell membrane-associated glycoprotein (T1A-2);

GENE INFORMATION

Official Symbol	podoplanin
Synonyms	PDPN; podoplanin; T1A; GP36; GP40; Gp38; OTS8; T1A2; TI1A; T1A-2; AGGRUS; HT1A-1; PA2.26; T1-alpha; hT1alpha-1; hT1alpha-2; PA2.26 antigen; glycoprotein 36; glycoprotein, 36-KD; lung type I cell membrane associated glycoprotein; lung type-I cell membrane-associated glycoprotein (T1A-2);
References	Astarita, J. L., et al. (2015). "The CLEC-2-podoplanin axis controls the contractility of

fibroblastic reticular cells and lymph node microarchitecture." Nat Immunol 16(1): 75-84.
PubMed;
