Immunotag™ Podoplanin Antibody

Antibody Specification

Catalog No.	ITA3110
Product Description	Immunotag™ Podoplanin Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Podoplanin
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC
Recommended Dilution	WB 1:500-1:2000, IHC 1:50-1:200
Concentration	1 mg/ml
Reactive Species	Human,Mouse
Host Species	Rabbit
Immunogen	A synthesized peptide derived from human Podoplanin.
Specificity	Podoplanin antibody detects endogenous levels of Podoplanin.
Purification	The antiserum was purified by peptide affinity chromatography.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	PDPN
Accession No.	Q86YL7

Antibody Specification

Alternate Names	Aggrus; Glycoprotein 36 KD; Glycoprotein 36; gp 36; GP 38; GP 40; gp36; GP38; GP40; HT1A 1; HT1A1; hT1alpha 1; hT1alpha 2; hT1alpha1; hT1alpha2; Lung type I cell membrane associated glycoprotein; Lung type I cell membrane associated glycoprotein isoform a; Lung type I cell membrane associated glycoprotein T1A 2; OTS 8; OTS8; OTTHUMP00000009640; OTTHUMP00000044504; PA2.26; PA2.26 antigen; Pdpn; PDPN_HUMAN; Podoplanin; PSEC0003; PSEC0025; T1 alpha; T1 ALPHA GENE; T1-alpha; T1A 2; T1A; TI1A; TIA 2; TIA2;
Description	Mediates effects on cell migration and adhesion through its different partners. During development plays a role in blood and lymphatic vessels separation by binding CLEC1B, triggering CLEC1B activation in platelets and leading to platelet activation and/or aggregation (PubMed:14522983, PubMed:15231832, PubMed:17616532, PubMed:18215137, PubMed:17222411). Interaction with CD9, on the contrary, attenuates platelet aggregation induced by PDPN (PubMed:18541721). Through MSN or EZR interaction promotes epithelial-mesenchymal transition (EMT) leading to ERZ phosphorylation and triggering RHOA activation leading to cell migration increase and invasiveness (PubMed:17046996, PubMed:21376833). Interaction with CD44 promotes directional cell migration in epithelial and tumor cells (PubMed:20962267). In lymph nodes (LNs), controls fibroblastic reticular cells (FRCs) adhesion to the extracellular matrix (ECM) and contraction of the actomyosin by maintaining ERM proteins (EZR; MSN and RDX) and MYL9 activation through association with unknown transmembrane proteins. Engagement of CLEC1B by PDPN promotes FRCs relaxation by blocking lateral membrane interactions leading to reduction of ERM proteins (EZR; MSN and RDX) and MYL9 activation (By similarity). Through binding with LGALS8 may participate to connection of the lymphatic endothelium to the surrounding extracellular matrix (PubMed:19268462). In keratinocytes, induces changes in cell morphology showing an elongated shape, numerous membrane protrusions, major reorganization of the actin cytoskeleton, increased motility and decreased cell adhesion (PubMed:15515019). Controls invadopodia stability and maturation leading to efficient degradation of the extracellular matrix (ECM) in tumor cells through modulation of RHOC activity in order to activate ROCK1/ROCK2 and LIMK1/LIMK2 and inactivation of CFL1 (PubMed:25486435). Required for normal lung cell proliferation and alveolus formation at birth (By similarity). Does not function as a water channel or as a regulator of aquaporin-type water channels (PubMed:9651190). Does not have any effect on folic acid or amino acid transport (By similarity).
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	43 kDa
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.