

Podoplanin Monoclonal Mouse Antibody (PDPN/1433)

Product Description

This antibody recognizes a muco-protein of 38-43 kDa, which is identified Podoplanin (PDPN). It localizes in stromal cells of peripheral lymphoid tissue and thymic epithelial cells. As a regulator of the lymphatic endothelium, podoplanin probably plays a role in maintaining the unique shape of podocytes. It is selectively expressed in lymphatic endothelium as well as lymphoangiomas, Kaposi'sarcomas, and in a subset of angiosarcomas with probable lymphatic differentiation. Recent studies have also shown podoplanin to be a highly sensitive and relatively specific marker for epithelioid mesothelioma. Therefore, it can be used in a panel to distinguish mesotheliomas or mesothelial cells from pulmonary carcinomas.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the [CF® Dye Brochure](#) for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

Stock status: Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

Catalog number key for antibody number 1433, Anti-Podoplanin (PDPN/1433)

Product attributes

Antibody number	#1433
Antibody reactivity (target)	Podoplanin
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	PDPN/1433
Isotype	IgG1, kappa
Molecular weight	38-43 kDa
Synonyms	Aggrus; Glycoprotein 36 KD; Glycoprotein 36; gp36; GP38; GP40; HT1A1; HT1alpha1; hT1alpha2; Lung type I cell membrane associated glycoprotein; Lung type I cell membrane associated glycoprotein T1A 2; OTS8; PA2.26; Pdpn; Podoplanin; PSEC0003; PSEC0025; T1-alpha; T1A; T1A1; TIA2
Human gene symbol	PDPN
Entrez gene ID	10630
SwissProt	Q86YL7
Unigene	468675
Immunogen	Recombinant human Podoplanin (PDPN) protein fragment (aa24-126) (exact sequence is proprietary)
Antibody target cellular localization	Mitochondrial, Plasma membrane
Verified antibody applications	IHC (FFPE) (verified)
Species reactivity	Human
Antibody application notes	Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody. Immunohistology (formalin): 0.5-1 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 min. Immunofluorescence 0.5-1 ug/mL. Western blotting 0.5-1 ug/mL. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Optimal dilution for a specific application should be determined by user
Positive control	HeLa Cells. Angiosarcoma or Mesothelioma.
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C, Protect fluorescent conjugates from light, Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Antibody research areas	Cancer
Cell/tissue expression	Lymphatics
Tumor expression	Mesothelioma

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel
BNC04	CF®405S	404/431	405	DAPI (microscopy), AF405
BNC88	CF®488A	490/515	488	GFP, FITC
BNC68	CF®568	562/583	532, 561	RFP, TRITC
BNC94	CF®594	593/614	561	Texas Red®
BNC40	CF®640R	642/662	633-640	Cy®5
BNC47	CF®647	650/665	633-640	Cy®5
BNCB	Biotin	N/A	N/A	N/A
BNUB	Purified	N/A	N/A	N/A
BNUM	Purified, BSA-free	N/A	N/A	N/A

Dye Features

- [CF®405S Features](#)
- [CF®488A Features](#)
- [CF®568 Features](#)
- [CF®594 Features](#)
- [CF®640R Features](#)
- [CF®647 Features](#)

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