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Mouse Monoclonal Antibody to PTPN14

Purified Mouse Monoclonal Antibody
Catalog # AO2382a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	Q15678
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2B3H7
Isotype	Mouse IgG1
Calculated MW	135261
Description	The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This PTP contains an N-terminal noncatalytic domain similar to that of band 4.1 superfamily cytoskeleton-associated proteins, which suggested the membrane or cytoskeleton localization of this protein. It appears to regulate lymphatic development in mammals, and a loss of function mutation has been found in a kindred with a lymphedema-choanal atresia.;
Immunogen	Purified recombinant fragment of human PTPN14 (AA: 896-1169) expressed in E. Coli.
Formulation	Purified antibody in PBS with 0.05% sodium azide
Application Note	ELISA: 1/10000; WB: 1/500 - 1/2000; IHC: 1/200 - 1/1000; ICC: 1/200 - 1/1000; FCM: 1/200 - 1/400

Additional Information

Gene ID	5784
Other Names	PEZ; PTP36
Dilution	WB~~1:1000 IHC~~1:100~500 FC~~1:10~50 ICC~~N/A E~~N/A
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Mouse Monoclonal Antibody to PTPN14 is for research use only and not for use in diagnostic or therapeutic procedures.

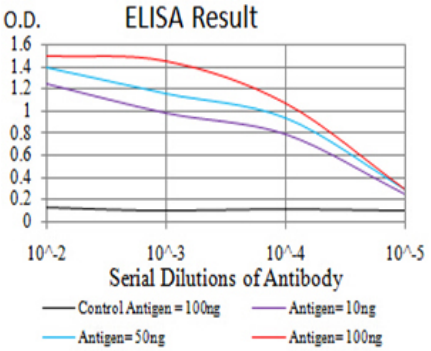
Protein Information

Name	PTPN14
Synonyms	PEZ, PTPD2
Function	Protein tyrosine phosphatase which may play a role in the regulation of lymphangiogenesis, cell-cell adhesion, cell-matrix adhesion, cell migration, cell growth and also regulates TGF-beta gene expression, thereby modulating epithelial-mesenchymal transition. Mediates beta-catenin dephosphorylation at adhesion junctions. Acts as a negative regulator of the oncogenic property of YAP, a downstream target of the hippo pathway, in a cell density-dependent manner. May function as a tumor suppressor.
Cellular Location	Cytoplasm. Cytoplasm, cytoskeleton. Nucleus. Note=Translocation into the nucleus is associated with induction of cell proliferation. Partially colocalized with actin filaments at the plasma membrane
Tissue Location	Ubiquitous.

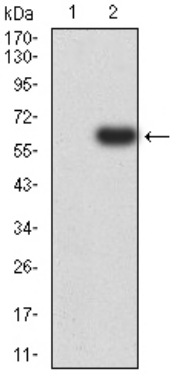
References

1.Oncogene. 2013 Apr 18;32(16):2087-95. ; 2.PLoS One. 2013 Apr 16;8(4):e61916. ;

Images

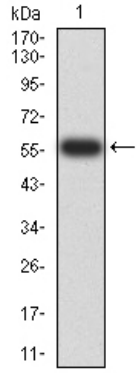


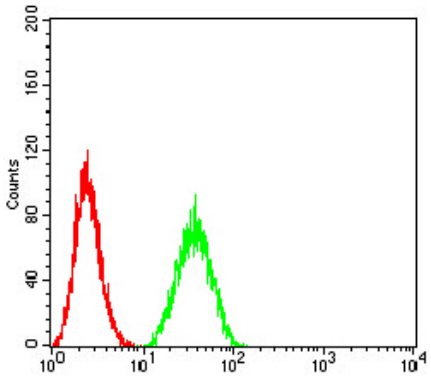
Black line: Control Antigen (100 ng);Purple line: Antigen (10ng); Blue line: Antigen (50 ng); Red line:Antigen (100 ng)



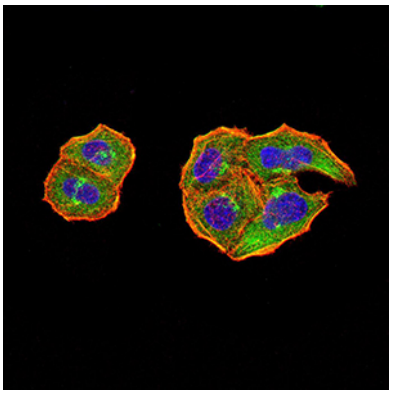
Western blot analysis using PTPN14 mAb against HEK293 (1) and PTPN14 (AA: 896-1169)-hIgGFc transfected HEK293 (2) cell lysate.

Western blot analysis using PTPN14 mAb against human PTPN14 (AA: 896-1169) recombinant protein. (Expected MW is 57.5 kDa)

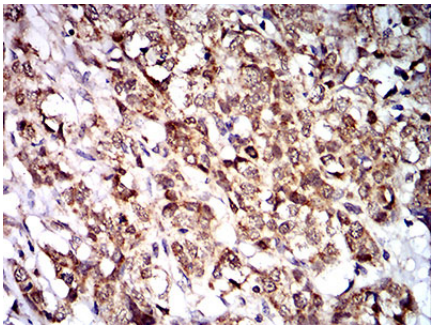




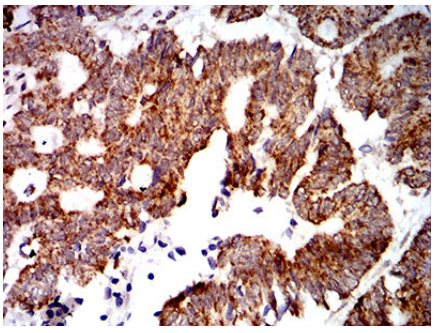
Flow cytometric analysis of Hela cells using PTPN14 mouse mAb (green) and negative control (red).



Immunofluorescence analysis of Hela cells using PTPN14 mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin. Secondary antibody from Fisher



Immunohistochemical analysis of paraffin-embedded breast cancer tissues using PTPN14 mouse mAb with DAB staining.



Immunohistochemical analysis of paraffin-embedded rectum cancer tissues using PTPN14 mouse mAb with DAB staining.