10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PTF1A Antibody (monoclonal) (M09)

Mouse monoclonal antibody raised against a partial recombinant PTF1A.
Catalog # AT3482a

Product Information

Application	WB, E
Primary Accession	Q7RTS3
Other Accession	NM_178161
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Lambda
Clone Names	1H1
Calculated MW	34970

Additional Information

Gene ID	256297
Other Names	Pancreas transcription factor 1 subunit alpha, Class A basic helix-loop-helix protein 29, bHLHa29, Pancreas-specific transcription factor 1a, bHLH transcription factor p48, p48 DNA-binding subunit of transcription factor PTF1, PTF1-p48, PTF1A, BHLHA29, PTF1P48
Target/Specificity	PTF1A (NP_835455, 250 a.a. ~ 328 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 E~~N/A
Format	Clear, colorless solution in phosphate buffered saline, pH 7.2 .
Storage	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Precautions	PTF1A Antibody (monoclonal) (M09) is for research use only and not for use in diagnostic or therapeutic procedures.

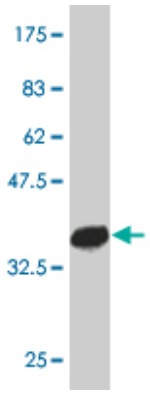
Background

This gene encodes a protein that is a component of the pancreas transcription factor 1 complex (PTF1) and is known to have a role in mammalian pancreatic development. The protein plays a role in determining whether cells allocated to the pancreatic buds continue towards pancreatic organogenesis or revert back to duodenal fates. The protein is thought to be involved in the maintenance of exocrine pancreas-specific gene expression including elastase 1 and amylase. Mutations in this gene cause cerebellar agenesis and loss of expression is seen in ductal type pancreas cancers.

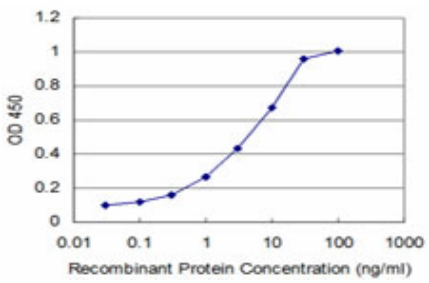
References

Multiple transcriptional mechanisms control Ptf1a levels during neural development including autoregulation by the PTF1-J complex. Meredith DM, et al. J Neurosci, 2009 Sep 9. PMID 19741120.A Turkish newborn infant with cerebellar agenesis/neonatal diabetes mellitus and PTF1A mutation. Tutak E, et al. Genet Couns, 2009. PMID 19650412.p/CAF modulates the activity of the transcription factor p48/Ptf1a involved in pancreatic acinar differentiation. Rodolosse A, et al. Biochem J, 2009 Mar 1. PMID 18834332.Origin of climbing fiber neurons and their developmental dependence on Ptf1a. Yamada M, et al. J Neurosci, 2007 Oct 10. PMID 17928434.PTF1 is an organ-specific and Notch-independent basic helix-loop-helix complex containing the mammalian Suppressor of Hairless (RBP-J) or its paralogue, RBP-L. Beres TM, et al. Mol Cell Biol, 2006 Jan. PMID 16354684.

Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (34.8 KDa) .



Detection limit for recombinant GST tagged PTF1A is approximately 0.3ng/ml as a capture antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.