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PEPD Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant PEPD.
Catalog # AT3268a

Product Information

Application	WB, IF, IP, E
Primary Accession	P12955
Other Accession	BC015027
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG1 Kappa
Clone Names	1D5-H3
Calculated MW	54548

Additional Information

Gene ID	5184
Other Names	Xaa-Pro dipeptidase, X-Pro dipeptidase, Imidodipeptidase, Peptidase D, Proline dipeptidase, Prolidase, PEPD, PRD
Target/Specificity	PEPD (AAH15027, 1 a.a. ~ 493 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IF~~1:50~200 IP~~N/A 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	PEPD Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

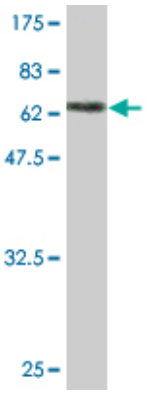
Background

This gene encodes a member of the peptidase family. The protein forms a homodimer that hydrolyzes dipeptides or tripeptides with C-terminal proline or hydroxyproline residues. The enzyme serves an important role in the recycling of proline, and may be rate limiting for the production of collagen. Mutations in this gene result in prolidase deficiency, which is characterized by the excretion of large amount of di- and tri-peptides containing proline. Multiple transcript variants encoding different isoforms have been found for this gene.

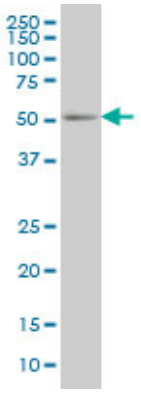
References

Dilatation of the ascending aorta is associated with low serum prolidase activity. Akcakoyun M, et al. Tohoku J Exp Med, 2010. PMID 20383038. Prolidase activity and oxidative status in patients with thalassemia major. Cakmak A, et al. J Clin Lab Anal, 2010. PMID 20087956. Serum prolidase activity and oxidative status in patients with stage I endometrial cancer. Arioz DT, et al. Int J Gynecol Cancer, 2009 Oct. PMID 19823062. Confirmation of multiple risk Loci and genetic impacts by a genome-wide association study of type 2 diabetes in the Japanese population. Takeuchi F, et al. Diabetes, 2009 Jul. PMID 19401414. Characterization of prolidase I and II purified from normal human erythrocytes: comparison with prolidase in erythrocytes from a patient with prolidase deficiency. Uramatsu S, et al. Amino Acids, 2009 Sep. PMID 19263194.

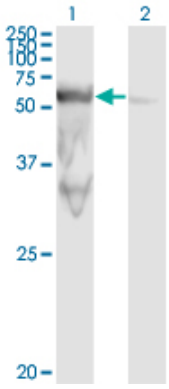
Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (79.97 KDa) .

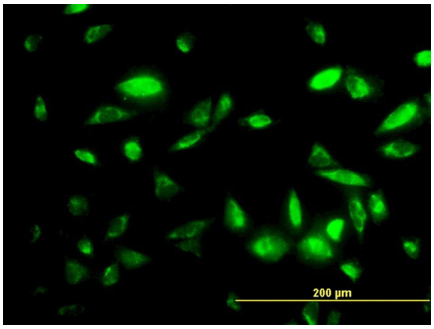


PEPD monoclonal antibody (M01), clone 1D5-H3 Western Blot analysis of PEPD expression in HepG2 ((Cat # AT3268a)

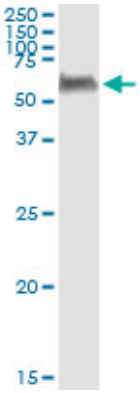


Western Blot analysis of PEPD expression in transfected 293T cell line by PEPD monoclonal antibody (M01), clone 1D5-H3.

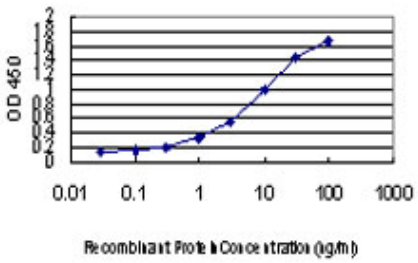
Lane 1: PEPD transfected lysate (Predicted MW: 54.6 KDa).
Lane 2: Non-transfected lysate.



Immunofluorescence of monoclonal antibody to PEPD on HepG2 cell. [antibody concentration 10 ug/ml]



Immunoprecipitation of PEPD transfected lysate using anti-PEPD monoclonal antibody and Protein A Magnetic Bead (U0007), and immunoblotted with PEPD MaxPab rabbit polyclonal antibody.



Detection limit for recombinant GST tagged PEPD is approximately 0.1ng/ml as a capture antibody.