

**PEPD Antibody (monoclonal) (M01)****Mouse monoclonal antibody raised against a full length recombinant PEPD.****Catalog # AT3268a****Specification**

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**PEPD Antibody (monoclonal) (M01) - Product Information**

Application	WB, IF, IP, E
Primary Accession	<a href="#">P12955</a>
Other Accession	<a href="#">BC015027</a>
Reactivity	Human
Host	mouse
Clonality	Monoclonal
Isotype	IgG1 Kappa
Calculated MW	54548

**PEPD Antibody (monoclonal) (M01) - 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**

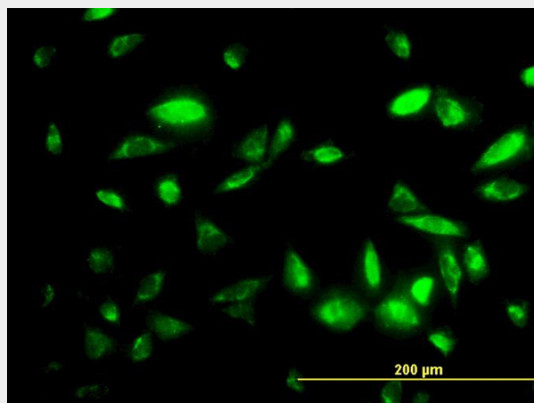
PEPD Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

**PEPD Antibody (monoclonal) (M01) - Protocols**

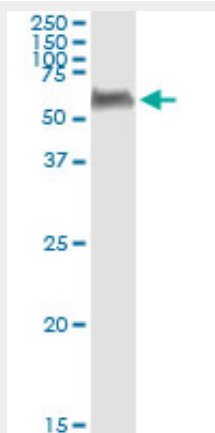
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

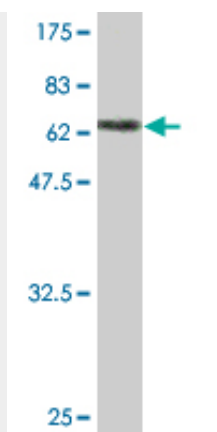
#### PEPD Antibody (monoclonal) (M01) - Images



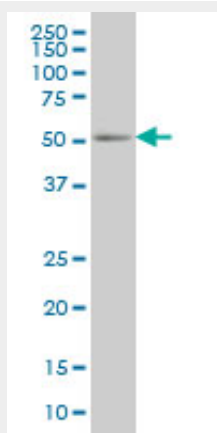
Immunofluorescence of monoclonal antibody to PEPD on HepG2 cell. [antibody concentration 10 ug/ml]



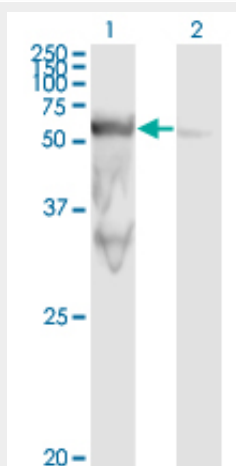
Immunoprecipitation of PEPD transfected lysate using anti-PEPD monoclonal antibody and Protein A Magnetic Bead ([U0007](#)), and immunoblotted with PEPD MaxPab rabbit polyclonal antibody.



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

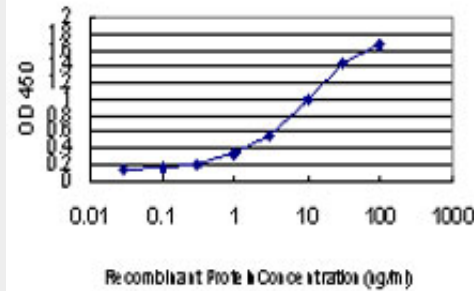


PEPD monoclonal antibody (M01), clone 1D5-H3 Western Blot analysis of PEPD expression in HepG2 ( (Cat # AT3268a )



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.



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

### **PEPD Antibody (monoclonal) (M01) - 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 prolydase 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.

### **PEPD Antibody (monoclonal) (M01) - References**

Dilatation of the ascending aorta is associated with low serum prolydase activity. Akcakoyun M, et al. Tohoku J Exp Med, 2010. PMID 20383038. Prolydase activity and oxidative status in patients with thalassemia major. Cakmak A, et al. J Clin Lab Anal, 2010. PMID 20087956. Serum prolydase 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 prolydase I and II purified from normal human erythrocytes: comparison with prolydase in erythrocytes from a patient with prolydase deficiency. Uramatsu S, et al. Amino Acids, 2009 Sep. PMID 19263194.