

PCSK1 Antibody (monoclonal) (M02)

Mouse monoclonal antibody raised against a partial recombinant PCSK1.

Catalog # AT3239a

Product Information

Application	WB, IHC, IF, E
Primary Accession	P29120
Other Accession	NM_000439
Reactivity	Human, Mouse, Rat
Host	Mouse
Clonality	monoclonal
Isotype	IgG3 Kappa
Clone Names	3D2
Calculated MW	84152

Additional Information

Gene ID	5122
Other Names	Neuroendocrine convertase 1, NEC 1, Prohormone convertase 1, Proprotein convertase 1, PC1, PCSK1, NEC1
Target/Specificity	PCSK1 (NP_000430, 652 a.a. ~ 753 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 IF~~1:50~200 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	PCSK1 Antibody (monoclonal) (M02) is for research use only and not for use in diagnostic or therapeutic procedures.

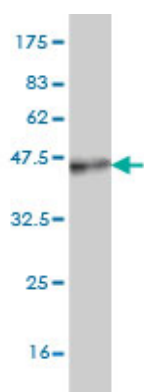
Background

The protein encoded by this gene belongs to the subtilisin-like proprotein convertase family. The members of this family are proprotein convertases that process latent precursor proteins into their biologically active products. This encoded protein is a type I proinsulin-processing enzyme that plays a key role in regulating insulin biosynthesis. It is also known to cleave proopiomelanocortin, prorenin, proenkephalin, prodynorphin, prosomatostatin and progastrin. Mutations in this gene are thought to cause obesity. This encoded protein is associated with carcinoid tumors. Mutations in this gene have been associated with susceptibility to obesity and proprotein convertase 1/3 deficiency. Multiple transcript variants encoding different isoforms have been found for this gene.

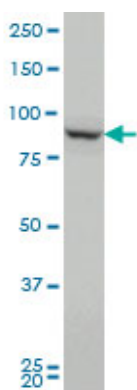
References

Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086. Evaluating the discriminative power of multi-trait genetic risk scores for type 2 diabetes in a northern Swedish population. Fontaine-Bisson B, et al. Diabetologia, 2010 Oct. PMID 20571754. Association of obesity risk SNPs in PCSK1 with insulin sensitivity and proinsulin conversion. Heni M, et al. BMC Med Genet, 2010 Jun 9. PMID 20534142. Association of PCSK1 rs6234 with obesity and related traits in a Chinese Han population. Qi Q, et al. PLoS One, 2010 May 17. PMID 20498726. Solution structure of proinsulin: connecting domain flexibility and prohormone processing. Yang Y, et al. J Biol Chem, 2010 Mar 12. PMID 20106974.

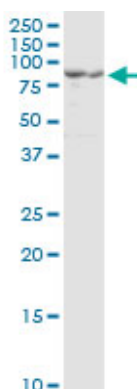
Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (36.96 KDa) .

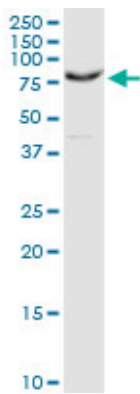


PCSK1 monoclonal antibody (M02), clone 3D2 Western Blot analysis of PCSK1 expression in HeLa (Cat # AT3239a)

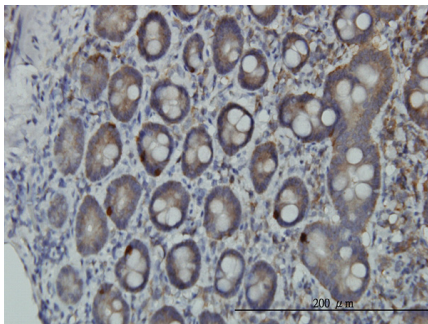
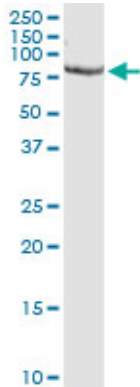


PCSK1 monoclonal antibody (M02), clone 3D2. Western Blot analysis of PCSK1 expression in PC-12 (Cat # AT3239a)

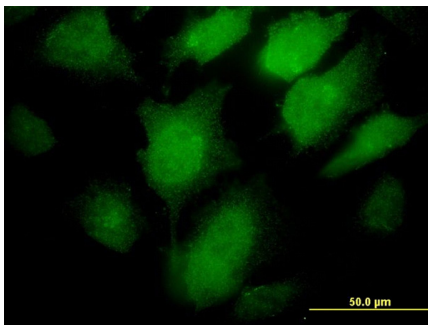
PCSK1 monoclonal antibody (M02), clone 3D2. Western Blot analysis of PCSK1 expression in Raw 264.7 (Cat # AT3239a)



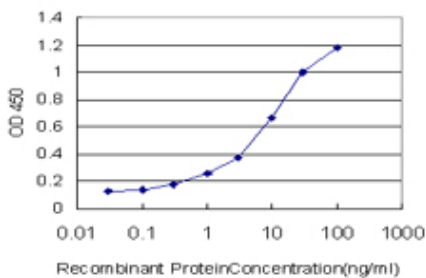
PCSK1 monoclonal antibody (M02), clone 3D2. Western Blot analysis of PCSK1 expression in NIH/3T3((Cat # AT3239a)



Immunoperoxidase of monoclonal antibody to PCSK1 on formalin-fixed paraffin-embedded human small Intestine. [antibody concentration 3 ug/ml]



Immunofluorescence of monoclonal antibody to PCSK1 on HeLa cell. [antibody concentration 30 ug/ml]



Detection limit for recombinant GST tagged PCSK1 is approximately 0.03ng/ml as a capture antibody.