

ABHD5 Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant ABHD5.

Catalog # AT1012a

Product Information

Application	WB, IHC, E
Primary Accession	Q8WTS1
Other Accession	BC021958
Reactivity	Human, Rat
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	1F3
Calculated MW	39096

Additional Information

Gene ID	51099
Other Names	1-acylglycerol-3-phosphate O-acyltransferase ABHD5, Abhydrolase domain-containing protein 5, Lipid droplet-binding protein CGI-58, ABHD5, NCIE2
Target/Specificity	ABHD5 (AAH21958, 1 a.a. ~ 349 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 IHC~~1:100~500 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	ABHD5 Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

The protein encoded by this gene belongs to a large family of proteins defined by an alpha/beta hydrolase fold, and contains three sequence motifs that correspond to a catalytic triad found in the esterase/lipase/thioesterase subfamily. It differs from other members of this subfamily in that its putative catalytic triad contains an asparagine instead of the serine residue. Mutations in this gene have been associated with Chananin-Dorfman syndrome, a triglyceride storage disease with impaired long-chain fatty acid oxidation.

References

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2. microRNA-29 fine-tunes the expression of key FOXA2-activated lipid metabolism genes and is dysregulated in animal models of insulin resistance and diabetes. Kurtz CL, Peck BC, Fannin EE, Beysen C, Miao J, Landstreet SR, Ding S, Turaga V, Lund PK, Turner S, Biddinger SB, Vickers KC, Sethupathy P. *Diabetes*. 2014 Apr 10;63(4):1033-42. Epub 2014 Apr 10.

3. Endurance Exercise Training Up-Regulates Lipolytic Proteins and Reduces Triglyceride Content in Skeletal Muscle of Obese Subjects. Louche K, Badin PM, Montastier E, Laurens C, Bourlier V, de Glisezinski I, Thalamas C, Viguerie N, Langin D, Moro CJ. *Clin Endocrinol Metab*. 2013 Oct 31;74(4):1092-102. Epub 2013 Jul 22.

4. Downregulation of adipose triglyceride lipase in the heart aggravates diabetic cardiomyopathy in db/db mice. Inoue T, Kobayashi K, Inoguchi T, Sonoda N, Maeda Y, Hirata E, Fujimura Y, Miura D, Hirano K, Takayanagi R. *Biochem Biophys Res Commun*. 2013 Aug 16;438(1):224-9. doi: 10.1016/j.bbrc.2013.07.063. Epub 2013 Jul 22.

5. Deficiency of Liver Comparative Gene Identification-58 (CGI-58) Causes Steatohepatitis and Fibrosis in Mice. Guo F, Ma Y, Kadegowda AK, Xie P, Liu G, Liu X, Miao H, Ou J, Su X, Zheng Z, Xue B, Shi H, Yu LJ. *Lipid Res*. 2013 Jun 3;54(4):1092-102. doi: 10.1194/jlr.M034710. Epub 2013 Jan 23.

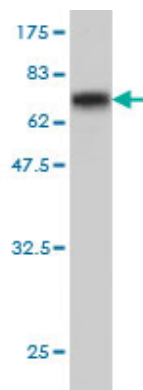
6. Cardiac-specific overexpression of perilipin 5 provokes severe cardiac steatosis via the formation of a lipolytic barrier. Pollak NM, Schweiger M, Jaeger D, Kolb D, Kumari M, Schreiber R, Kolleritsch S, Markolin P, Grabner GF, Heier C, Zierler KA, Rulicke T, Zimmermann R, Lass A, Zechner R, Haemmerle GJ. *Lipid Res*. 2013 Apr;54(4):1092-102. doi: 10.1194/jlr.M034710. Epub 2013 Jan 23.

7. PNPLA1 mutations cause autosomal recessive congenital ichthyosis in golden retriever dogs and humans. Grall A, Guaguere E, Planchais S, Grond S, Bourrat E, Hausser I, Hitte C, Le Gallo M, Derbois C, Kim GJ, Lagoutte L, Degorce-Rubiales F, Radner FP, Thomas A, Kury S, Bensignor E, Fontaine J, Pin D, Zimmermann R, Zechner R, Lathrop M, Galibert F, Andre C, Fischer J. *Nat Genet*. 2012 Jan 15;44(2):140-7. doi: 10.1038/ng.1056.

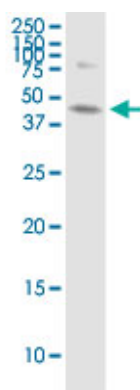
8. Liver X Receptor (LXR) Regulates Human Adipocyte Lipolysis. Stenson BM, Ryden M, Venteclef N, Dahlman I, Pettersson AM, Mairal A, Astrom G, Blomqvist L, Wang V, Jocken JW, Clement K, Langin D, Arner P, Laurencikienė JJ. *Biol Chem*. 2011 Jan 7;286(1):370-9. Epub 2010 Oct 28.

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Images

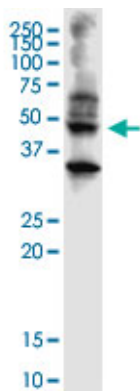


Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (64.13 KDa) .



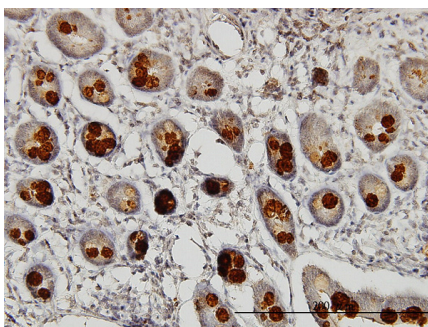
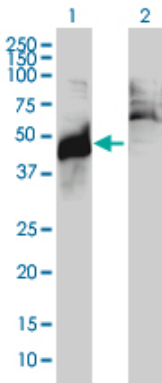
ABHD5 monoclonal antibody (M01), clone 1F3. Western Blot analysis of ABHD5 expression in rat testis.

ABHD5 monoclonal antibody (M01), clone 1F3. Western Blot analysis of ABHD5 expression in HeLa.

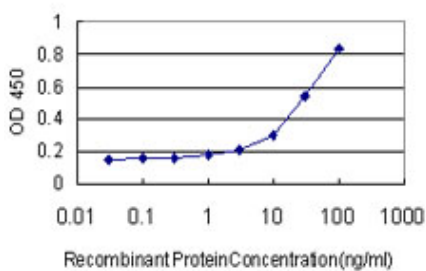


Western Blot analysis of ABHD5 expression in transfected 293T cell line by ABHD5 monoclonal antibody (M01), clone 1F3.

Lane 1: ABHD5 transfected lysate(39 KDa).
Lane 2: Non-transfected lysate.



Immunoperoxidase of monoclonal antibody to ABHD5 on formalin-fixed paraffin-embedded human small Intestine. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged ABHD5 is approximately 1ng/ml as a capture antibody.

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