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FADS1 Antibody (monoclonal) (M04)

Mouse monoclonal antibody raised against a partial recombinant FADS1.
Catalog # AT1989a

Product Information

Application	WB, IHC, E
Primary Accession	O60427
Other Accession	NM_013402
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2D9
Calculated MW	51964

Additional Information

Gene ID	3992
Other Names	Fatty acid desaturase 1, 11419-, Delta(5) fatty acid desaturase, D5D, Delta(5) desaturase, Delta-5 desaturase, FADS1, FADSD5
Target/Specificity	FADS1 (NP_037534, 1 a.a. ~ 99 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 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	FADS1 Antibody (monoclonal) (M04) is for research use only and not for use in diagnostic or therapeutic procedures.

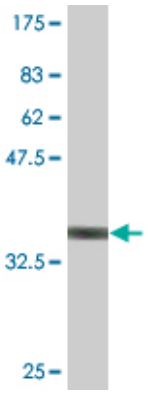
Background

The protein encoded by this gene is a member of the fatty acid desaturase (FADS) gene family. Desaturase enzymes regulate unsaturation of fatty acids through the introduction of double bonds between defined carbons of the fatty acyl chain. FADS family members are considered fusion products composed of an N-terminal cytochrome b5-like domain and a C-terminal multiple membrane-spanning desaturase portion, both of which are characterized by conserved histidine motifs. This gene is clustered with family members FADS1 and FADS2 at 11q12-q13.1; this cluster is thought to have arisen evolutionarily from gene duplication based on its similar exon/intron organization.

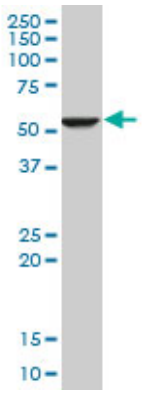
References

Genetic variation of the FADS1 FADS2 gene cluster and n-6 PUFA composition in erythrocyte membranes in the European Prospective Investigation into Cancer and Nutrition-Potsdam study. Zietemann V, et al. Br J Nutr, 2010 Aug 9. PMID 20691134.Genome-wide association analysis identifies multiple loci related to resting heart rate. Eijgelsheim M, et al. Hum Mol Genet, 2010 Oct 1. PMID 20639392.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.FADS genetic variants and omega-6 polyunsaturated fatty acid metabolism in a homogeneous island population. Mathias RA, et al. J Lipid Res, 2010 Sep. PMID 20562440.

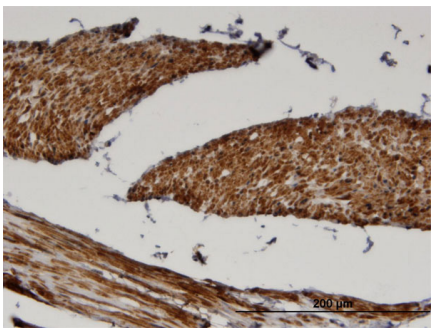
Images



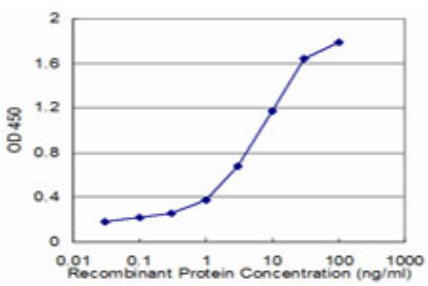
Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.63 KDa) .



monoclonal antibody (M04), clone 2D9. Western Blot analysis of expression in Hela S3 NE ((Cat # AT1989a)



Immunoperoxidase of monoclonal antibody to FADS1 on formalin-fixed paraffin-embedded human skeletal muscle. [antibody concentration 3 ug/ml]



Detection limit for recombinant GST tagged FADS1 is approximately 0.03ng/ml as a capture antibody.

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