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HMBS Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a full length recombinant HMBS.
Catalog # AT2381a

Product Information

Application	WB, E
Primary Accession	P08397
Other Accession	BC000520
Reactivity	Human
Host	mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	3E9
Calculated MW	39330

Additional Information

Gene ID	3145
Other Names	Porphobilinogen deaminase, PBG-D, Hydroxymethylbilane synthase, HMBS, Pre-uroporphyrinogen synthase, HMBS, PBGD, UPS
Target/Specificity	HMBS (AAH00520.1, 1 a.a. ~ 361 a.a) full-length recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Dilution	WB~~1:500~1000 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	HMBS Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

Background

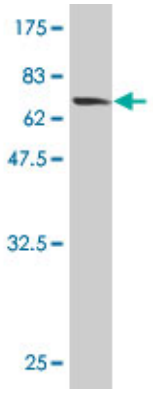
This gene encodes a member of the hydroxymethylbilane synthase superfamily. The encoded protein is the third enzyme of the heme biosynthetic pathway and catalyzes the head to tail condensation of four porphobilinogen molecules into the linear hydroxymethylbilane. Mutations in this gene are associated with the autosomal dominant disease acute intermittent porphyria. Alternatively spliced transcript variants encoding different isoforms have been described.

References

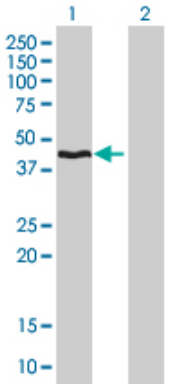
Variation at the NFATC2 Locus Increases the Risk of Thiazolinedinedione-Induced Edema in the Diabetes

REduction Assessment with ramipril and rosiglitazone Medication (DREAM) Study. Bailey SD, et al. Diabetes Care, 2010 Jul 13. PMID 20628086.[Molecular genetic study of acute intermittent porphyria in Russia: mutation analysis and functional polymorphism search in porphobilinogen deaminase gene] Surin VL, et al. Genetika, 2010 Apr. PMID 20536026.Gene-centric association signals for lipids and apolipoproteins identified via the HumanCVD BeadChip. Talmud PJ, et al. Am J Hum Genet, 2009 Nov. PMID 19913121.Acute intermittent porphyria--impact of mutations found in the hydroxymethylbilane synthase gene on biochemical and enzymatic protein properties. Ulbrichova D, et al. FEBS J, 2009 Apr. PMID 19292878.Structure of human porphobilinogen deaminase at 2.8 A: the molecular basis of acute intermittent porphyria. Gill R, et al. Biochem J, 2009 Apr 28. PMID 19207107.

Images

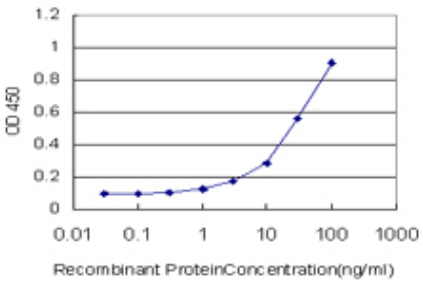


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (65.45 KDa) .



Western Blot analysis of HMBS expression in transfected 293T cell line by HMBS monoclonal antibody (M01), clone 3E8.

Lane 1: HMBS transfected lysate(39.71 KDa).
Lane 2: Non-transfected lysate.



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