

For Research Use Only

HMBS Recombinant monoclonal antibody

Catalog Number: 87431-1-RR



Basic Information

Catalog Number: 87431-1-RR	GenBank Accession Number: BC000520	Purification Method: Protein A purification
Size: 100ul , Concentration: 1000 µg/ml by Nanodrop;	GeneID (NCBI): 3145	CloneNo.: 252812E9
Source: Rabbit	UNIPROT ID: P08397	Recommended Dilutions: WB: 1:2000-1:10000
Isotype: IgG	Full Name: hydroxymethylbilane synthase	
Immunogen Catalog Number: AG6509	Calculated MW: 39 kDa	
	Observed MW: 42 kDa	

Applications

Tested Applications: WB, ELISA	Positive Controls: WB : HEK-293 cells, HeLa cells, HepG2 cells, Caco-2 cells, L02 cells
Species Specificity: human	

Background Information

Hydroxymethylbilane synthase (HMBS), also known as porphobilinogen deaminase (PBGD) or previously as uroporphyrinogen I synthase, is a key enzyme in the heme biosynthesis pathway. HMBS is a cytoplasmic enzyme that catalyzes a critical step in the heme biosynthesis pathway: the polymerization of four porphobilinogen molecules to form linear hydroxymethylbilane. It is expressed in all tissues, with the highest levels observed in the liver and erythroid precursors to meet high heme demand. Two main isoforms exist: a ubiquitous "housekeeping" isoform and an erythroid-specific isoform. The observed molecular weight of human HMBS protein is approximately 40-42 kDa (as determined by SDS-PAGE). The erythroid-specific isoform has a slightly lower molecular weight due to a different translation initiation site. (PMID: 19292878, PMID: 12555854)

Storage

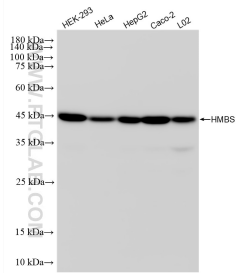
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

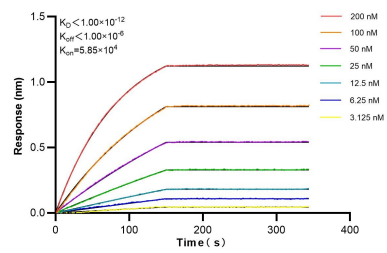
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 87431-1-RR (HMBS antibody) at dilution of 1:5000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLI) kinetic assays of 87431-1-RR against Human HMBS were performed. The affinity constant is below 1 pM.