For Research Use Only

HMBS Recombinant monoclonal antibody, PBS Only

Catalog Number:87431-1-PBS

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Basic Information

Catalog Number:
87431-1-PBS

Size:
100ug , Concentration: 1 mg/ml by Nanodrop;

Source:
Rabbit

Isotype:
IgG

Immunogen Catalog Number:
AG6509

GenBank Accession Number:
BC000520

GeneID (NCBI):
3145

UNIPROT ID:
P08397

Full Name:
hydroxymethylbilane synthase

Calculated MW:
39 kDa

Observed MW:
42 kDa

Purification Method:
Protein A purification

CloneNo.:
252812E9

Applications

Tested Applications:
WB, Indirect ELISA

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 -80°C.
Storage Buffer:
PBS only, pH7.3

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
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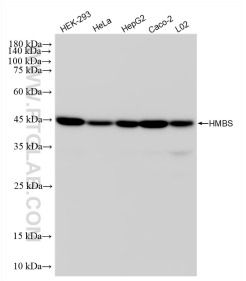
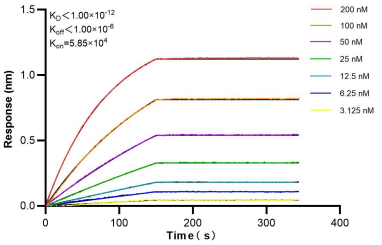
Selected Validation Data



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. This data was developed using the same antibody clone with 87431-1-PBS in a different storage buffer formulation.



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