For Research Use Only

HMBS Recombinant monoclonal antibody

Catalog Number:87431-1-RR

proteintech®
Antibodies | ELISA kits | Proteins
www.ptglab.com

Basic Information

Catalog Number:
87431-1-RR

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

Recommended Dilutions:
WB: 1:2000-1:10000

Applications

Tested Applications:
WB, ELISA

Species Specificity:
human

Positive Controls:

WB : HEK-293 cells, HeLa cells, HepG2 cells, Caco-2 cells, L02 cells

Background Information

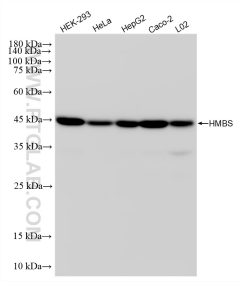
Hydroxymethylbilane synthase (HMBS), also known as porphobilinogen deaminase (PBGD) or previously as uroporphyrinogen I synthase, is a key enzyme in the heme biosynthesis pathway. HMBS is a cytoplasmic enzyme that catalyzes a critical step in the heme biosynthesis pathway: the polymerization of four 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

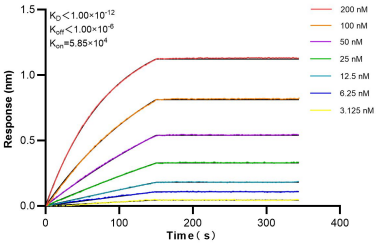
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol, pH7.3
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:
T: 4006900926 E: Proteintech-CN@ptglab.com W: ptgcn.com

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.