

AR50258PU-N

Human HMBS (1-361, His-tag) - Purified

Alternate names:

Hydroxymethylbilane synthase, PBGD, Porphobilinogen deaminase, Pre-uroporphyrinogen synthase, UPS

Quantity:

0.5 mg

Concentration:

1 mg/ml (determined by Bradford assay)

Background:

Porphobilinogen deaminase, also known as HMBS, is a member of the hydroxymethylbilane synthase superfamily. It is a cytoplasmic enzyme found in the heme synthesis pathway. Deficiency of HMBS causes errors in pyrrole metabolism which in turn leads to an inherited autosomal disorder called acute intermittent porphyria (AIP) which is characterized by acute attacks of neurological dysfunctions with hypertension, tachycardia, peripheral neurologic disturbances, abdominal pain and excessive amounts of aminolevulinic acid and porphobilinogen in the urine.

Uniprot ID:

[P08397](#)

NCBI:

[NP_000181](#)

GeneID:

[3145](#)

Species:

Human

Source:

E. coli

Format:

State: Liquid purified protein

Purity: >95% by SDS - PAGE

Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 1mM DTT, 10% glycerol, 0.1M NaCl

Description:

Recombinant human HMBS protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.

AA Sequence:

MGSSHHHHH SSGLVPRGSH MGSMSGNGN AAATAEENSP KMRVIRVGTR KSQLARIQTD
SVVATLKASY PGLQFEIIM STTGDKILD ALKIGEKSL FTKELEHALE KNEVDLVVHS
LKDLPTVLPP GFTIGAICKR ENPHDAVVFH PKFVGKTLET LPEKSVVGTS SLRRAAQLQR
KFPHFLEFRSI RGNLNTRLRK LDEQQEFSAI ILATAGLQRM GWHNRVQGIL HPEECMYAVG
QGALGVEVRA KDQDILDVVG VLHDPETLLR CIAERAFLRH LEGGCSVPVA VHTAMKDGQL
YLTGGVWSLD GSDSIQETMQ ATIHVPAQHE DGPEDDPQLV GITARNIPRG PQLAAQNGLI
SLANLLLSKG AKNILDVARQ LNDAH

Molecular weight: 41.9 kDa (385aa) confirmed by MALDI-TOF

Storage:

Store undiluted at 2-8°C for one week or (in aliquots) at -20°C to -80°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

Schneider Yin X., et al. (2004) J Inherit Metab Dis. 625-631:471-474. Sheppard L., et al. (1995) Paediatr Anaesth. 15:426-428.