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**Product Data Sheet**


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Product Name: HMBS Human  
 Cat. No.: GP21791  
 Batch No.: 1

**Product Data**

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped with Ice Packs.
Synonyms	Porphobilinogen deaminase; PBG-D; Hydroxymethylbilane synthase; HMBS; Pre-uroporphyrinogen synthase; HMBS; PBGD; UPS; PORC.		
Amino Acid Sequence	MGSSHHHHHH SGLVPRGSH MGSMSGNGN AAATAEENSP KMRVIRVGTR KSQLARIQTD SVVATLKASY PGLQFEIIM STTGDKILDT ALSKIGEKSL FTKELEHALE KNEVDLVVHS LKDLPTVLPP GFTIGAICKR ENPHDAVVFH PKFVGKTLET LPEKSVVGTS SLRRAAQLQR KFPHLEFRSI RGNLNTRLRK LDEQQEFSAI ILATAGLQRM GWHNRVQIL HPEECMYAVG QGALGVEVRA KDQDILDVLG VLHDPETLLR CIAERAFLRH LEGGCSVPVA VHTAMKDGQL YLTGGVWSLD GSDSIQETMQ ATIHVPAQHE DGPEDDPQLV GITARNIPRG PQLAAQNLGI SLANLLLSKG AKNILDVARQ LNDAH.		
Formulation	The HMBS solution (1mg/ml) contains 20mM Tris-HCl buffer (pH 8.0), 1mM DTT, 10% glycerol and 0.1M NaCl.		

**Introduction**

Porphobilinogen deaminase (HMBS) belongs to the hydroxymethylbilane synthase superfamily. HMBS is a cytoplasmic enzyme found in the heme synthesis pathway. HMBS is the 3rd enzyme of the heme biosynthetic pathway and catalyzes the head to tail condensation of 4 porphobilinogen molecules into the linear hydroxymethylbilane. HMBS gene mutations cause errors in pyrrole metabolism which in turn lead to the autosomal dominant disease acute intermittent porphyria.

**Stability**

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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Address: 10292 Central Ave. #205, Montclair, CA, USA

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### Background

HMBS Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 385 amino acids (1-361) and having a molecular mass of 41.9kDa. HMBS is fused to a 24 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

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