

## [KD Validated] Anti-HMBS Rabbit mAb

Purified Recombinant Rabbit Monoclonal Antibody

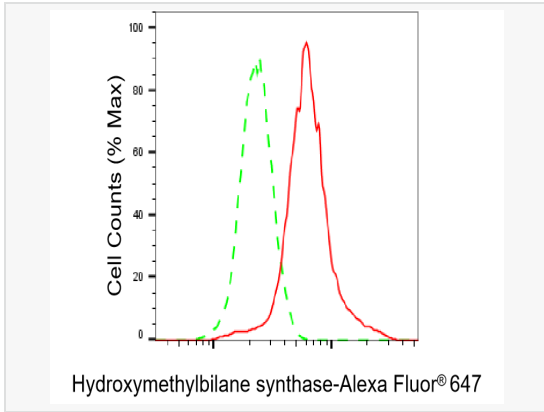
Catalog # R021637

### Product Information

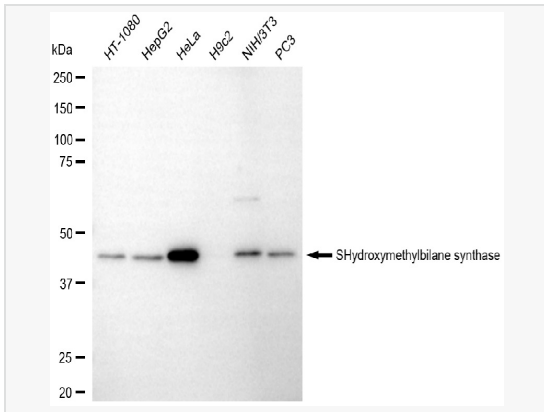
Application	WB, FC
Reactivity	Human, Mouse
Dilution	WB 1:1,000~1:5,000; FC 1:200~1:2,000
Host	Rabbit
Clonality	Monoclonal
Clone No.	88E83J07
Isotype	IgG
Label	Unconjugated
Immunogen	A synthesized peptide derived from human HMBS
Format	Affinity purified monoclonal antibody supplied in PBS with 0.02% sodium azide and 50% glycerol, pH 7.3.
Storage	Shipped on wet ice. Store at -20°C. Stable for 12 months from date of receipt. Aliquoting is unnecessary for -20°C storage.
Precautions	[KD Validated] Anti-HMBS Rabbit mAb [88E83J07] is for research use only and not for use in diagnostic or therapeutic procedures.

### Protein Information

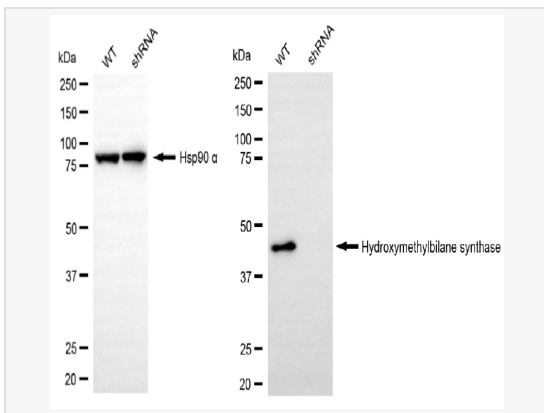
Synonyms	HMBS; Hydroxymethylbilane Synthase; Porphobilinogen Deaminase; PBGD; UPS; Porphyria, Acute; Chester Type; Pre-Uroporphyrinogen Synthase; Uroporphyrinogen I Synthase; EC 2.5.1.61; PBG-D; PORC; Uroporphyrinogen I Synthetase.
Calculated MW	Calculated MW: 39 kDa; Observed MW: 42 kDa
Uniprot ID	P08397
Gene ID	3145
Background	This gene encodes a member of the hydroxymethylbilane synthase superfamily. The encoded protein is the third enzyme of the heme biosynthetic pathway and catalyzes the head to tail condensation of four porphobilinogen molecules into the linear hydroxymethylbilane. Mutations in this gene are associated with the autosomal dominant disease acute intermittent porphyria. Alternatively spliced transcript variants encoding different isoforms have been described. [provided by RefSeq, Jul 2008]
Cellular Location	Belongs to the HMBS family.
Tissue Location	Isoform 1 is ubiquitously expressed. Isoform 2 is found only in erythroid cells.



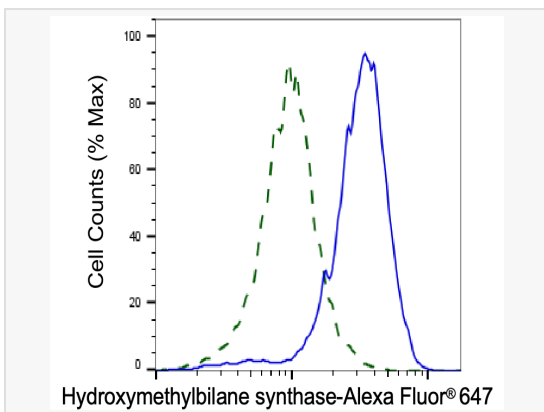
Flow cytometric analysis of Hydroxymethylbilane synthase expression in HeLa cells using Hydroxymethylbilane synthase antibody (R021637, 1:2,000). Green, isotype control; red, Hydroxymethylbilane synthase.



Western blotting analysis using hydroxymethylbilane synthase antibody (R021637). Total cell lysates (30  $\mu$ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with hydroxymethylbilane synthase antibody (R021637, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Western blotting analysis using hydroxymethylbilane synthase antibody (R021637). Hydroxymethylbilane synthase expression in wild-type (WT) and hydroxymethylbilane synthase (HMBS) shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with hydroxymethylbilane synthase antibody (R021637, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (1:20,000) respectively. Image was developed using ECL Substrate Kit.



Validation of Hydroxymethylbilane synthase knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with Hydroxymethylbilane synthase antibody (R021637, 1:2,000) and analyzed using BD flow cytometer.