

### Product datasheet for UM870041

## OriGene Technologies, Inc.

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#### **HMBS Mouse Monoclonal Antibody [Clone ID: UMAB144]**

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: UMAB144
Applications: IF, IHC, WB

**Reactivity:** WB 1:2000, IHC 1:200 **Reactivity:** Human, Mouse, Rat

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Full length human recombinant protein of human HMBS (NP\_000181) produced in HEK293T

cell

**Formulation:** PBS (pH 7.3) containing 1% BSA, 50% glycerol and 0.02% sodium azide.

**Concentration:** 0.5~1.0 mg/ml (Lot Dependent)

**Purification:** Purified from mouse ascites fluids or tissue culture supernatant by affinity chromatography

(protein A/G)

Conjugation: Unconjugated

**Storage:** Store at -20°C as received.

**Stability:** Stable for 12 months from date of receipt.

**Gene Name:** hydroxymethylbilane synthase

Database Link: NP 000181

Entrez Gene 15288 MouseEntrez Gene 25709 RatEntrez Gene 3145 Human

P08397

**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]

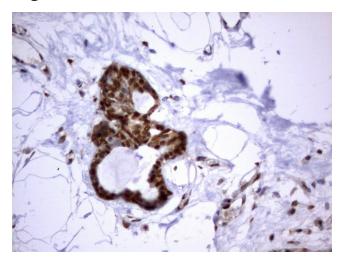
Synonyms: PBG-D; PBGD; PORC; UPS



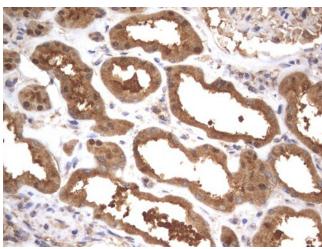
**Protein Families:** Druggable Genome

**Protein Pathways:** Metabolic pathways, Porphyrin and chlorophyll metabolism

# **Product images:**

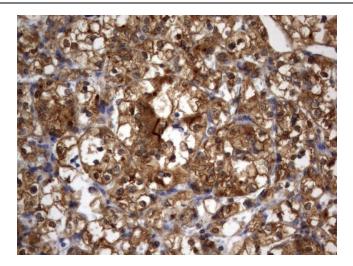


Immunohistochemical staining of paraffinembedded Human breast tissue using anti-HMBS mouse monoclonal antibody. ([UM800041]; heatinduced epitope retrieval by 10mM citric buffer, pH9.0, 120°C for 3min)

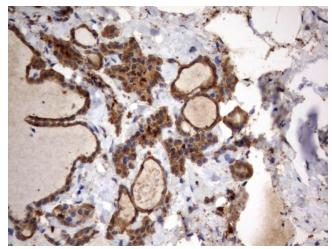


Immunohistochemical staining of paraffinembedded Human Kidney tissue using anti-HMBS mouse monoclonal antibody. ([UM800041]; heat-induced epitope retrieval by 10mM citric buffer, pH9.0, 120°C for 3min)

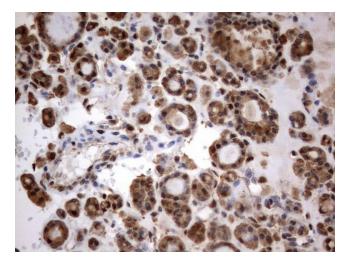




Immunohistochemical staining of paraffinembedded Carcinoma of Human kidney tissue using anti-HMBS mouse monoclonal antibody. ([UM800041]; heat-induced epitope retrieval by 10mM citric buffer, pH9.0, 120°C for 3min)

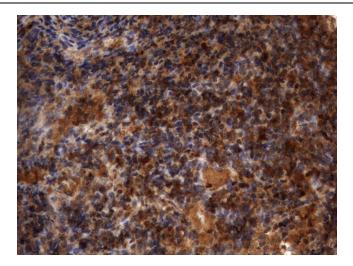


Immunohistochemical staining of paraffinembedded Human thyroid tissue using anti-HMBS mouse monoclonal antibody. ([UM800041]; heat-induced epitope retrieval by 10mM citric buffer, pH9.0, 120°C for 3min)

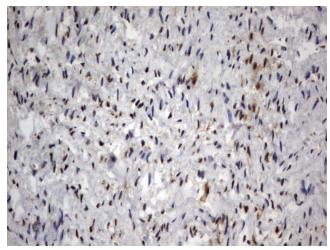


Immunohistochemical staining of paraffinembedded Carcinoma of Human thyroid tissue using anti-HMBS mouse monoclonal antibody. ([UM800041]; heat-induced epitope retrieval by 10mM citric buffer, pH9.0, 120°C for 3min)

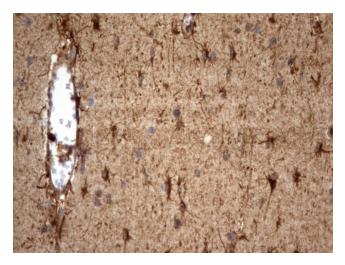




Immunohistochemical staining of paraffinembedded Human lymph node tissue using anti-HMBS mouse monoclonal antibody. ([UM800041]; heat-induced epitope retrieval by 10mM citric buffer, pH9.0, 120°C for 3min)

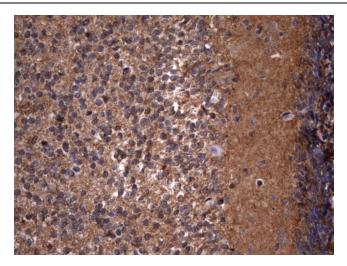


Immunohistochemical staining of paraffinembedded Human muscle tissue using anti-HMBS mouse monoclonal antibody. ([UM800041]; heat-induced epitope retrieval by 10mM citric buffer, pH9.0, 120°C for 3min)

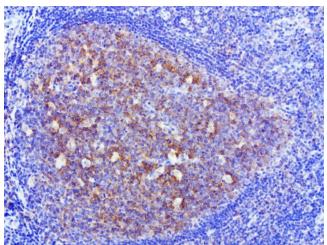


Immunohistochemical staining of paraffinembedded Human embryonic brain cortex tissue using anti-HMBS mouse monoclonal antibody. ([UM800041]; heat-induced epitope retrieval by 10mM citric buffer, pH9.0, 120°C for 3min)

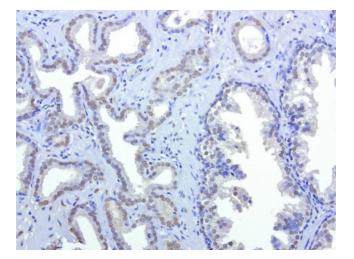




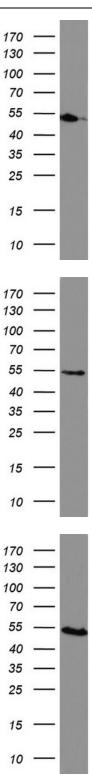
Immunohistochemical staining of paraffinembedded Human embryonic cerebellum using anti-HMBSmouse monoclonal antibody. ([UM800041]; heat-induced epitope retrieval by 10mM citric buffer, pH9.0, 120°C for 3min)



Immunohistochemical staining of paraffinembedded human tonsil using anti-HMBS clone UMAB144 mouse monoclonal antibody at 1:400 with Polink2 Broad HRP DAB detection kit ([UM800041]); heat-induced epitope retrieval with citrate buffer, pH6.0at 95-100C. Strong cytoplasmic and membraneous staining is seen on tonsil germinal and non-germinal centers. Some weak nuclear stain was also observed.



Immunohistochemical staining of paraffinembedded human prostate cancer using anti-HMBS clone UMAB144 mouse monoclonal antibody at 1:400 with Polink2 Broad HRP DAB detection kit ([UM800041]); heat-induced epitope retrieval with citrate buffer, pH6.0at 95-100C. Weak nuclear staining is seen on tumor cells.

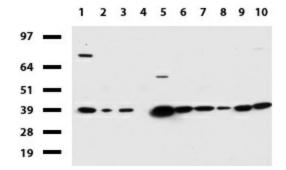


Western blot analysis of HT29 cell lysate (35ug) by using anti-HMBS monoclonal antibody.

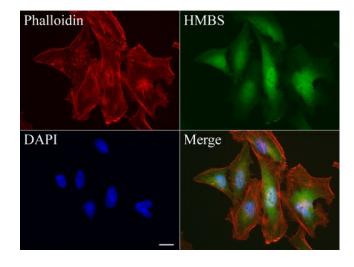
Western blot analysis of K562 cell lysate (35ug) by using anti-HMBS monoclonal antibody.

Western blot analysis of KM12 cell lysate (35ug) by using anti-HMBS monoclonal antibody.





Western blot of human tissue lysates (15ug) from 10 different tissues (1: Testis, 2: Omentum, 3: Uterus, 4: Breast, 5: Brain, 6: Liver, 7: Ovary, 8: Thyroid, 9: Colon, 10: Spleen ). Diluation: 1:500.



Immunofluorescent staining of HeLa cells using anti-HMBS mouse monoclonal antibody ([UM800041], green, 1:50). Actin filaments were labeled with Alexa Fluor® 594 Phalloidin (red), and nuclear with DAPI (blue). Scale bar, 20µm.