

Product datasheet for TA500682AM

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

FH Mouse Monoclonal Antibody (Biotin conjugated) [Clone ID: OTI9G4]

Product data:

Product Type: Primary Antibodies

Clone Name: OTI9G4

Applications: FC, IF, IHC, WB

Recommended Dilution: WB 1:1000, IHC 1:50, IF 1:100, FLOW 1:100

Reactivity: Human, Dog, Rat, Mouse

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

Immunogen: Full length human recombinant protein of human FH (NP_000134) produced in HEK293T cell.

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

Concentration: 0.5 mg/ml

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

(protein A/G)

Conjugation: Biotin

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

Predicted Protein Size: 50.2 kDa

Gene Name: fumarate hydratase

Database Link: NP 000134

Entrez Gene 24368 RatEntrez Gene 14193 MouseEntrez Gene 480092 DogEntrez Gene 2271

<u>Human</u> <u>P07954</u>





Background: The protein encoded by this gene is an enzymatic component of the tricarboxylic acid (TCA)

cycle, or Krebs cycle, and catalyzes the formation of L-malate from fumarate. It exists in both a cytosolic form and an N-terminal extended form, differing only in the translation start site used. The N-terminal extended form is targeted to the mitochondrion, where the removal of

the extension generates the same form as in the cytoplasm. It is similar to some

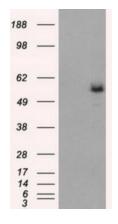
thermostable class II fumarases and functions as a homotetramer. Mutations in this gene can cause fumarase deficiency and lead to progressive encephalopathy. [provided by RefSeq]

Synonyms: FMRD; HLRCC; LRCC; MCL; MCUL1

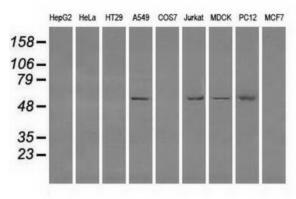
Protein Families: Druggable Genome

Protein Pathways: Citrate cycle (TCA cycle), Metabolic pathways, Pathways in cancer, Renal cell carcinoma

Product images:

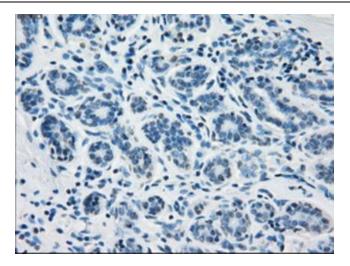


HEK293T cells were transfected with the pCMV6-ENTRY control (Left lane) or pCMV6-ENTRY FH ([RC200614], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FH. Positive lysates [LY400053] (100ug) and [LC400053] (20ug) can be purchased separately from OriGene.

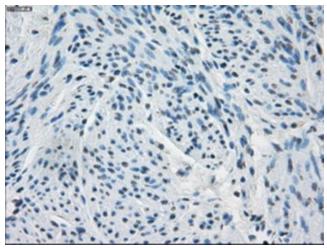


Western blot analysis of extracts (35ug) from 9 different cell lines by usin g anti-FH monoclonal antibody (HepG2: human; HeLa: human; SVT2: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).

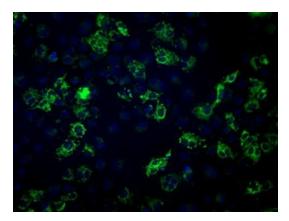




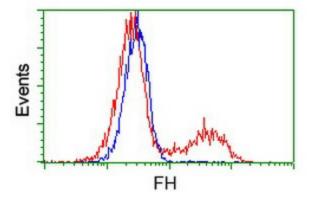
Immunohistochemical staining of paraffinembedded Human breast tissue within the normal limits using anti-FH mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500682])



Immunohistochemical staining of paraffinembedded Human endometrium tissue within the normal limits using anti-FH mouse monoclonal antibody. (Heat-induced epitope retrieval by 10mM citric buffer, pH6.0, 100°C for 10min, [TA500682])



Anti-FH mouse monoclonal antibody ([TA500682]) immunofluorescent staining of COS7 cells transiently transfected by pCMV6-ENTRY FH ([RC200614]).



HEK293T cells transfected with either [RC200614] overexpress plasmid (Red) or empty vector control plasmid (Blue) were immunostained by anti-FH antibody ([TA500682]), and then analyzed by flow cytometry.