

Product datasheet for CF500675

FH Mouse Monoclonal Antibody [Clone ID: OTI1F10]

Product data:

Product Type:	Primary Antibodies
Clone Name:	OTI1F10
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:	Lyophilized powder (original buffer 1X PBS, pH 7.3, 8% trehalose)
Reconstitution Method:	For reconstitution, we recommend adding 100uL distilled water to a final antibody concentration of about 1 mg/mL. To use this carrier-free antibody for conjugation experiment, we strongly recommend performing another round of desalting process. (OriGene recommends Zeba Spin Desalting Columns, 7KMWCO from Thermo Scientific)
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.
Predicted Protein Size:	50.2 kDa
Gene Name:	fumarate hydratase
Database Link:	NP_000134 Entrez Gene 24368 Rat Entrez Gene 14193 Mouse Entrez Gene 480092 Dog Entrez Gene 2271 Human P07954


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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:

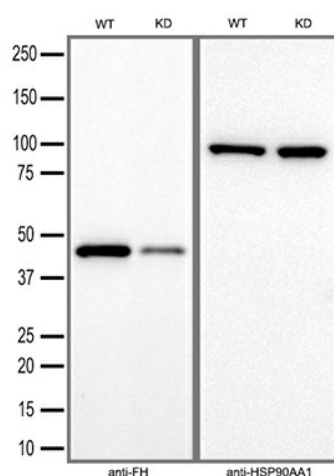
FMRD; HLRCC; LRCC; MCL; MCUL1

Protein Families:

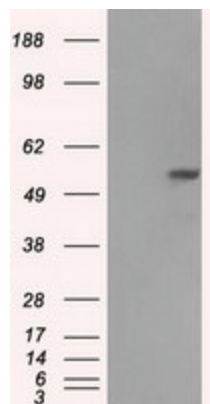
Druggable Genome

Protein Pathways:

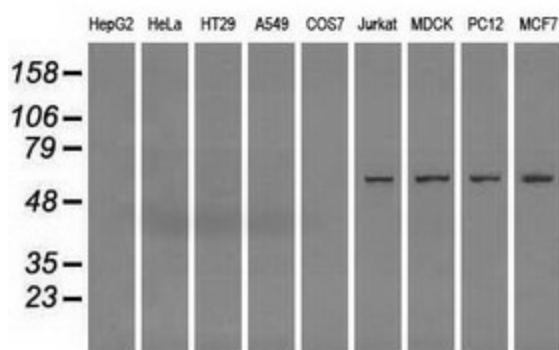
Citrate cycle (TCA cycle), Metabolic pathways, Pathways in cancer, Renal cell carcinoma

Product images:


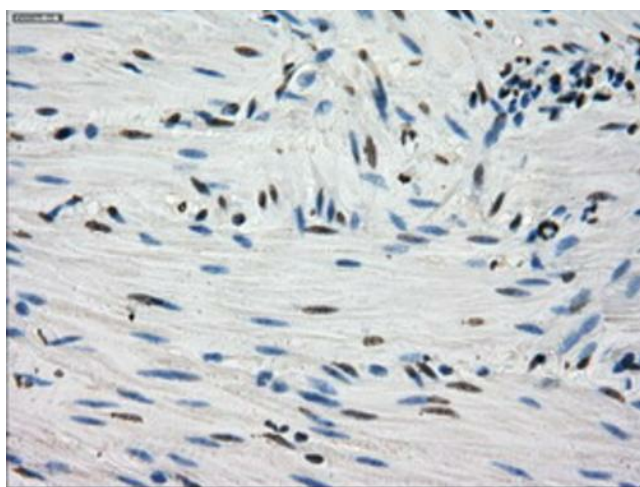
Equivalent amounts of cell lysates (30 ug per lane) of wild-type HeLa cells (WT) and FH-Knockdown HeLa cells (KD) were separated by SDS-PAGE and immunoblotted with anti-FH monoclonal antibody [TA500675] (1:2000). Then the blotted membrane was stripped and reprobed with anti-HSP90AA1 antibody as a loading control.



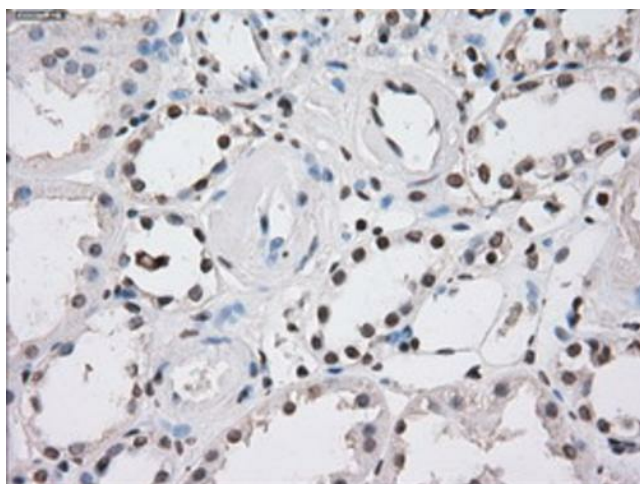
HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY FH (Cat# [RC200614], Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-FH (Cat# [TA500675]). Positive lysates [LY400053] (100ug) and [LC400053] (20ug) can be purchased separately from OriGene.



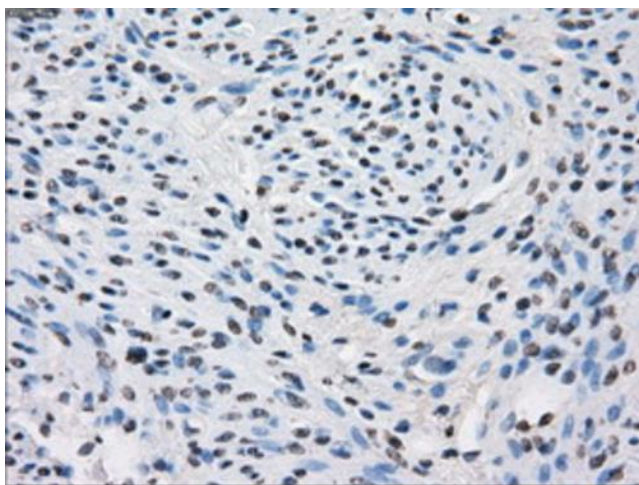
Western blot analysis of extracts (35ug) from 9 different cell lines by using anti-FH monoclonal antibody (HepG2: human; HeLa: human; HT29: mouse; A549: human; COS7: monkey; Jurkat: human; MDCK: canine; PC12: rat; MCF7: human).



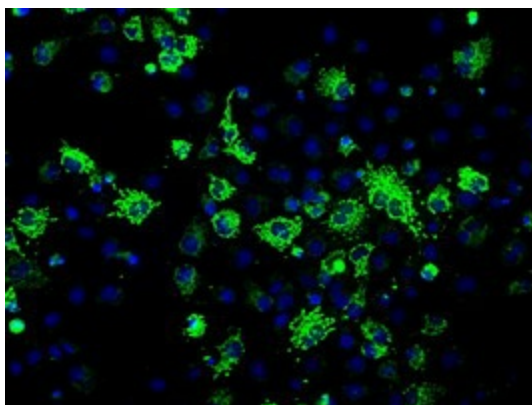
Immunohistochemical staining of paraffin-embedded Human colon tissue within the normal limits using anti-FH mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



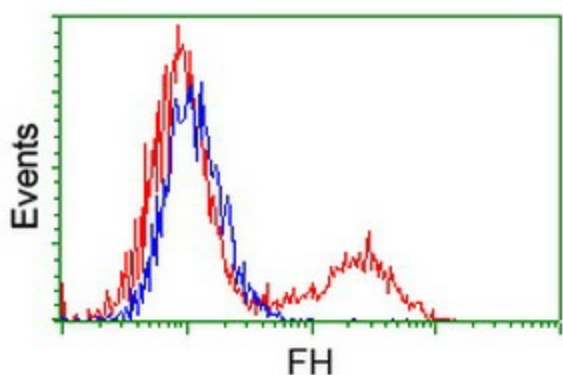
Immunohistochemical staining of paraffin-embedded Human Kidney tissue within the normal limits using anti-FH mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Immunohistochemical staining of paraffin-embedded Human endometrium tissue within the normal limits using anti-FH mouse monoclonal antibody. Heat-induced epitope retrieval by EDTA solution buffer pH 8.0 at 120°C for 3 min.



Anti-FH mouse monoclonal antibody ([TA500675]) 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 ([TA500675]), and then analyzed by flow cytometry.