

**KD-Validated Anti-FumaRate HydRatase Mouse Monoclonal Antibody**  
**Mouse monoclonal antibody**  
**Catalog # AGI2055****Specification****KD-Validated Anti-FumaRate HydRatase Mouse Monoclonal Antibody - Product Information**

Application	WB, FC, ICC
Primary Accession	<a href="#">P07954</a>
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	Predicted, 55 kDa, observed, 45 kDa kDa
Gene Name	FH
Aliases	FH; FumaRate HydRatase; Fumarase; FumaRate HydRatase, Mitochondrial; EC 4.2.1.2 HsFH; Epididymis Secretory Sperm Binding Protein; HLRCC; MCUL1; FMRD; LRCC; MCL
Immunogen	Recombinant protein of human FH

**KD-Validated Anti-FumaRate HydRatase Mouse Monoclonal Antibody - Additional Information**

Gene ID	2271
<b>Other Names</b>	
Fumarate hydratase, mitochondrial, Fumarase {ECO:0000303 PubMed:27037871, ECO:0000303 PubMed:3828494, ECO:0000303 Ref.2}, HsFH, 4.2.1.2, FH {ECO:0000303 PubMed:27037871, ECO:0000312 HGNC:HGNC:3700}	

**KD-Validated Anti-FumaRate HydRatase Mouse Monoclonal Antibody - Protein Information**

**Name** FH {ECO:0000303|PubMed:27037871, ECO:0000312|HGNC:HGNC:3700}

**Function**

Catalyzes the reversible stereospecific interconversion of fumarate to L-malate (PubMed:<a href="http://www.uniprot.org/citations/30761759" target="\_blank">30761759</a>). Experiments in other species have demonstrated that specific isoforms of this protein act in defined pathways and favor one direction over the other (Probable).

**Cellular Location**

[Isoform Mitochondrial]: Mitochondrion

**Tissue Location**

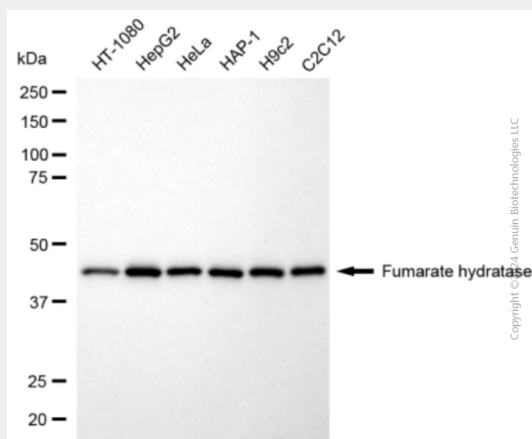
Expressed in red blood cells; underexpressed in red blood cells (cytoplasm) of patients with hereditary non-spherocytic hemolytic anemia of unknown etiology.

## KD-Validated Anti-FumaRate HydRatase Mouse Monoclonal Antibody - Protocols

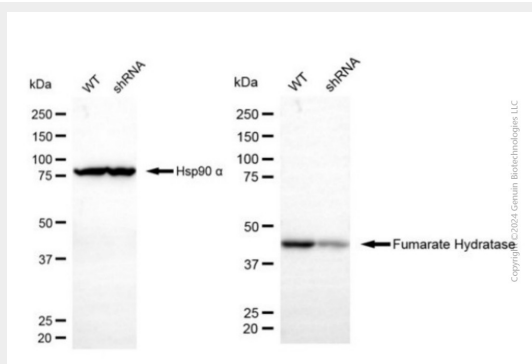
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

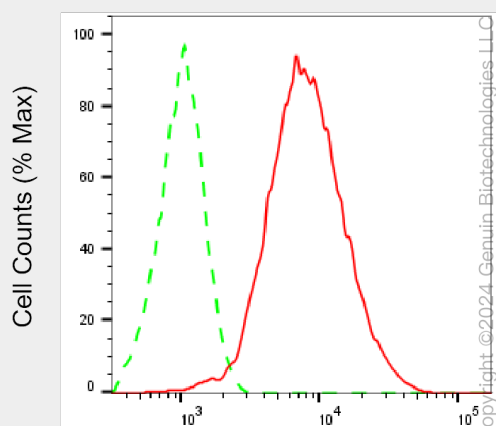
## KD-Validated Anti-FumaRate HydRatase Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-fumarate hydratase antibody (Cat#AGI2055). Total cell lysates (5 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-fumarate hydratase antibody (Cat#AGI2055, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.

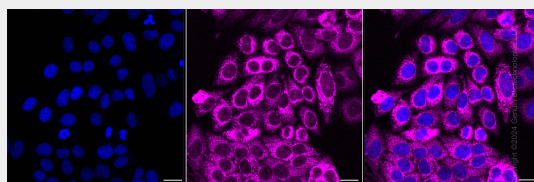


Western blotting analysis using anti-fumarate hydratase antibody (Cat #AGI2055). Fumarate hydratase expression in wild-type (WT) and fumarate hydratase (FH) shRNA knockdown (KD) HeLa cells with 5 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-fumarate hydratase antibody (Cat #AGI2055, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody (Cat #101, 1:20,000) respectively.



Fumarate hydratase-Alexa Fluor® 647

Flow cytometric analysis of Fumarate hydratase expression in HepG2 cells using anti-Fumarate hydratase antibody (Cat#AGI2055, 1:2,000). Green, isotype control; red, Fumarate hydratase.



Immunocytochemical staining of HepG2 cells with anti-Fumarate hydratase associated protein antibody (Cat#AGI2055, 1:1,000). Nuclei were stained blue with DAPI; Fumarate hydratase associated protein was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: High. Scale bar, 20  $\mu$ m.