

**FH Antibody (N-term)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AW5544**

**Specification**

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**FH Antibody (N-term) - Product Information**

|                   |                             |
|-------------------|-----------------------------|
| Application       | WB,E                        |
| Primary Accession | <a href="#">P07954</a>      |
| Reactivity        | Human, Mouse                |
| Host              | Rabbit                      |
| Clonality         | Polyclonal                  |
| Calculated MW     | H=55,50;M=54,50;R=54,50 KDa |
| Isotype           | Rabbit IgG                  |
| Antigen Source    | HUMAN                       |

**FH Antibody (N-term) - Additional Information**

**Gene ID** 2271

**Antigen Region**  
107-135

**Other Names**  
Fumarate hydratase, mitochondrial, Fumarase, FH

**Dilution**  
WB~~1:1000

**Target/Specificity**  
This FH antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 107-135 amino acids from the N-terminal region of human FH.

**Storage**  
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**  
FH Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

**FH Antibody (N-term) - 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

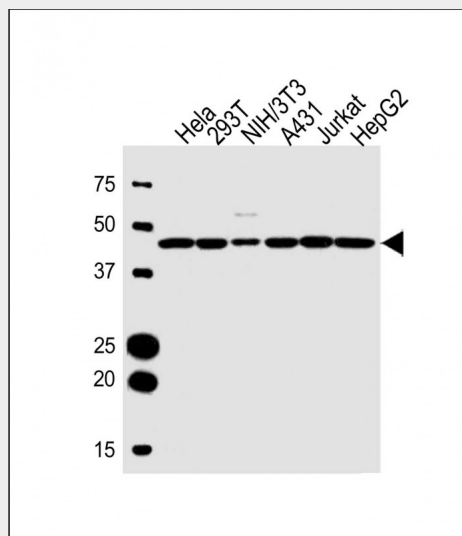
Expressed in red blood cells; underexpressed in red blood cells (cytoplasm) of patients with hereditary non-spherocytic hemolytic anemia of unknown etiology.

## FH Antibody (N-term) - 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](#)

## FH Antibody (N-term) - Images



All lanes : Anti-FH Antibody (N-term) at 1:1000 dilution Lane 1: HeLa whole cell lysate Lane 2: 293T whole cell lysate Lane 3: NIH/3T3 whole cell lysate Lane 4: A431 whole cell lysate Lane 5: Jurkat whole cell lysate Lane 6: HepG2 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 55 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

## FH Antibody (N-term) - 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.

#### **FH Antibody (N-term) - References**

Shimada, M., et al. Hum. Genet. 128(4):433-441(2010)  
Allegri, G., et al. J. Inherit. Metab. Dis. 33(4):411-419(2010)  
Yogev, O., et al. PLoS Biol. 8 (3), E1000328 (2010) :  
Yang, Y., et al. Cancer Genet. Cytogenet. 196(1):45-55(2010)  
Rikova, K., et al. Cell 131(6):1190-1203(2007)