

Rabbit FH/Fumarase Polyclonal Antibody | anti-FH antibody

Anti-FH/Fumarase Picoband Antibody

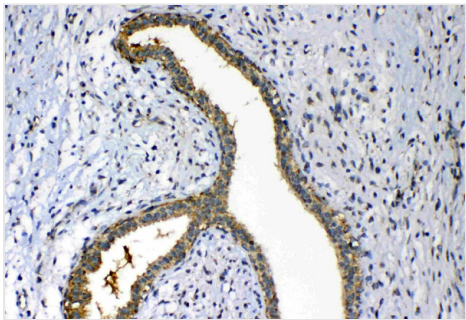
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19157	Rabbit	Human, Mouse, Rat No cross reactivity with other proteins.	Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

FH/Fumarase; Polyclonal Antibody; Anti-FH/Fumarase Picoband Antibody; Fumarate hydratase; mitochondrial; Fumarase; 4.2.1.2; FH; anti-FH antibody

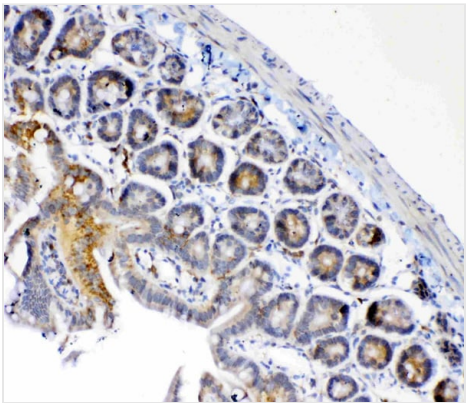
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat No cross reactivity with other proteins.
Clonality	Polyclonal
Purity/Purification	Immunogen affinity purified
Form/Format	Lyophilized
Concentration	Add 0.2ml of distilled water will yield a concentration of 500ug/ml. (varies by lot)
Sequence Length	467
Applicable Applications for anti-FH antibody	IHC (Immunohistochemistry), WB (Western Blot)
Application Notes	WB: 0.1-0.5mug/ml Immunohistochemistry (Paraffin-embedded Section): 0.5-1mug/ml
Immunogen	A synthetic peptide corresponding to a sequence of human FH (YDKAAKIAKTAHKGSTLKETAIELGYLTAEQFDEWVKPKDMLGPK).
Subcellular Localization	Isoform Mitochondrial: Mitochondrion.
Tissue Specificity	Expressed in red blood cells; underexpressed in red blood cells (cytoplasm) of patients with hereditary non-spherocytic hemolytic anemia of unknown etiology.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.



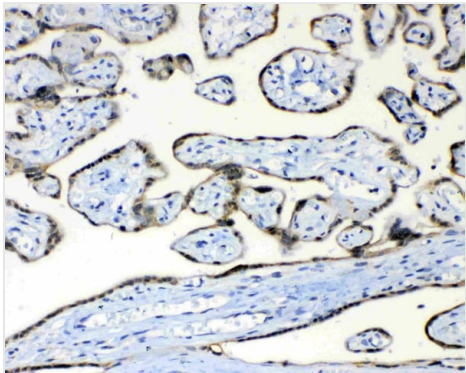
IHC (Immunohistochemistry)

Figure 6. IHC analysis of FH using anti-FH antibody (AAA19157).FH was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-FH Antibody (AAA19157) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



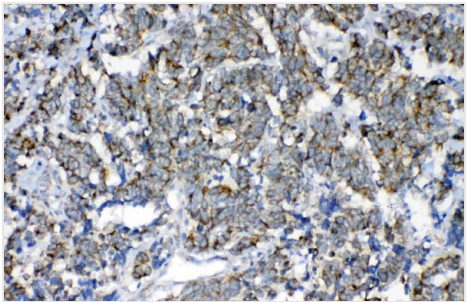
IHC (Immunohistochemistry)

Figure 5. IHC analysis of FH using anti-FH antibody (AAA19157).FH was detected in paraffin-embedded section of mouse small intestine tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-FH Antibody (AAA19157) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



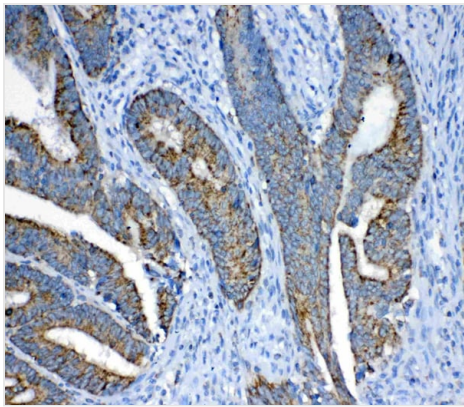
IHC (Immunohistochemistry)

Figure 4. IHC analysis of FH using anti-FH antibody (AAA19157).FH was detected in paraffin-embedded section of human placenta tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-FH Antibody (AAA19157) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



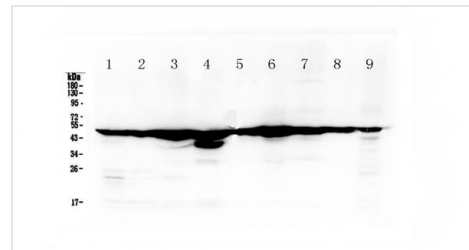
IHC (Immunohistochemistry)

Figure 3. IHC analysis of FH using anti-FH antibody (AAA19157).FH was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-FH Antibody (AAA19157) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of FH using anti-FH antibody (AAA19157). FH was detected in paraffin-embedded section of human colon cancer tissue. Heat mediated antigen retrieval was performed in citrate buffer (pH6, epitope retrieval solution) for 20 mins. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-FH Antibody (AAA19157) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of FH using anti-FH antibody (AAA19157). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat lymphaden tissue lysates, Lane 2: rat small intestine tissue lysates, Lane 3: rat gaster tissue lysates, Lane 4: mouse kidney tissue lysates, Lane 5: mouse testis tissue lysates, Lane 6: mouse gaster tissue lysates, Lane 7: human K562 whole cell lysates, Lane 8: human U937 whole cell lysates, Lane 9: human HL-60 whole cell lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-FH antigen affinity purified polyclonal antibody at 0.5 ug/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for FH at approximately 49KD. The expected band size for FH is at 55KD.

ADDITIONAL INFORMATION

Related Product Information for anti-FH antibody

Description: Fumarase (or fumarate hydratase) is an enzyme that catalyzes the reversible hydration/dehydration of fumarate to malate. Fumarase comes in two forms: mitochondrial and cytosolic. The mitochondrial isoenzyme is involved in the Krebs Cycle (also known as the Tricarboxylic Acid Cycle [TCA] or the Citric Acid Cycle), and the cytosolic isoenzyme is involved in the metabolism of amino acids and fumarate. Subcellular localization is established by the presence of a signal sequence on the amino terminus in the mitochondrial form, while subcellular localization in the cytosolic form is established by the absence of the signal sequence found in the mitochondrial variety. This enzyme participates in 2 metabolic pathways: citric acid cycle, reductive citric acid cycle (CO₂ fixation), and is also important in renal cell carcinoma. Mutations in this gene have been associated with the development of leiomyomas in the skin and uterus in combination with renal cell carcinoma.

Protein Function: Also acts as a tumor suppressor.

NCBI AND UNIPROT INFORMATION

NCBI GI #	19743875
NCBI GeneID	2271
NCBI Accession #	NP_000134.2
NCBI GenBank Nucleotide #	NM_000143.3
UniProt Accession #	P07954; B1ANK7
Molecular Weight	50,213 Da
NCBI Official Full Name	fumarate hydratase, mitochondrial
NCBI Official Synonym Full Names	fumarate hydratase
NCBI Official Symbol	FH
NCBI Official Synonym Symbols	MCL; FMRD; LRCC; HLRCC; MCUL1
NCBI Protein Information	fumarate hydratase, mitochondrial
UniProt Protein Name	Fumarate hydratase, mitochondrial
UniProt Gene Name	FH

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/fh-fumarase-antibody-immunohistochemistry-western-blot-elisa/19157>