A Reliable Research Partner in Life Science and Medicine

Recombinant Human Fumarase/FH Protein (His Tag)

Catalog No. PKSH030901

Note: Centrifuge before opening to ensure complete recovery of vial contents.

Description

Synonyms Fumarate Hydratase

Mitochondrial;Fumarase;FH;FMRD;HLRCC;LRCC;MCL;MCUL1

Species Expression Host E.coli

Sequence Ala 45-Lys 510

P07954-1 Accession Calculated Molecular Weight 52.0 kDa Observed molecular weight 45 kDa Tag C-His

Bioactivity Measured by its ability to transform 1µmole of Fumarate to L-malate per minute at

pH 7.5 at 37°C. Specific activity is > 25 unit/mg.

Properties

Purity > 85 % as determined by reducing SDS-PAGE.

Endotoxin Please contact us for more information.

Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to **Storage**

-80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots

of reconstituted samples are stable at < -20°C for 3 months.

Shipping This product is provided as lyophilized powder which is shipped with ice packs.

Formulation Lyophilized from sterile 10mM Tris, 5mM EDTA, 1mM DTT, pH 7.5

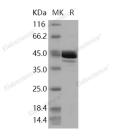
Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as

protectants before lyophilization.

Please refer to the specific buffer information in the printed manual.

Reconstitution Please refer to the printed manual for detailed information.

Data



> 85 % as determined by reducing SDS-PAGE.

Background

For Research Use Only

Toll-free: 1-888-852-8623 Tel: 1-832-243-6086 Fax: 1-832-243-6017 Email: techsupport@elabscience.com

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Elabscience Bionovation Inc.



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Fumarate Hydratase (FH) 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. Fumarate Hydratase 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. Individuals with hemizygous germline fumarate hydratase (FH) mutations are predisposed to renal cancer. These tumors predominantly exhibit functional inactivation of the remaining wild-type allele, implicating FH inactivation as a tumor-promoting event.

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