

Datasheet for ABIN7317412

FH Protein (His tag)



Overview

Quantity:	100 μg
Target:	FH
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Biological Activity:	Active
Purification tag / Conjugate:	This FH protein is labelled with His tag.

Product Details

Purpose:	Recombinant Human Fumarase/FH Protein (His Tag)(Active)
Sequence:	Ala 45-Lys 510
Characteristics:	A DNA sequence encoding the mature form of human FH (P07954-1) (Ala 45-Lys 510) was fused with a polyhistidine tag at the C-terminus and an initial Met at the N-terminus.
Purity:	> 85 % as determined by reducing SDS-PAGE.
Biological Activity Comment:	Measured by its ability to transform 1 umole of Fumarate to L-malate per minute at pH 7.5 at 37!aC. Specific activity is > 25 unit/mg

Target Details

Target:	FH
Alternative Name:	Fumarase/FH (FH Products)

Target Details

Background:

Background: 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.

Synonym: Fumarate Hydratase Mitochondrial, Fumarase, FH,FMRD,HLRCC,LRCC,MCL,MCUL1

Molecular Weight:

52 kDa

Application Details

Restrictions:

For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	Please refer to the printed manual for detailed information.
Buffer:	Lyophilized from sterile 10 mM Tris, 5 mM EDTA, 1 mM DTT, pH 7.5
Storage:	4 °C,-20 °C,-80 °C
Storage Comment:	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -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.