

Datasheet for ABIN7554149 **IFITM1 Protein (AA 1-125) (His tag)**



Overview

Quantity:	1 mg
Target:	IFITM1
Protein Characteristics:	AA 1-125
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This IFITM1 protein is labelled with His tag.

Product Details

Product Details	
Purpose:	Custom-made recombinant IFITM1 Protein expressed in mammalian cells.
Sequence:	MHKEEHEVAV LGPPPSTILP RSTVINIHSE TSVPDHVVWS LFNTLFLNWC CLGFIAFAYS
	VKSRDRKMVG DVTGAQAYAS TAKCLNIWAL ILGILMTIGF ILLLVFGSVT VYHIMLQIIQ EKRGY
	Sequence without tag. The proposed Purification-Tag is based on experiences with the
	expression system, a different complexity of the protein could make another tag necessary.
	In case you have a special request, please contact us.
Specificity:	If you are looking for a specific domain and are interested in a partial protein or a different
	isoform, please contact us regarding an individual offer.
Characteristics:	Key Benefits:
	Made to order protein - from design to production - by highly experienced protein experts.
	 Protein expressed in mammalian cells and purified in one-step affinity chromatography
	The optimized expression system ensures reliability for intracellular, secreted and
	transmembrane proteins.

· State-of-the-art algorithm used for plasmid design (Gene synthesis).

This protein is a made-to-order protein and will be made for the first time for your order. Our experts in the lab try to ensure that you receive soluble protein.

If you are not interested in a full length protein, please contact us for individual protein fragments.

The big advantage of ordering our made-to-order proteins in comparison to ordering custom made proteins from other companies is that there is no financial obligation in case the protein cannot be expressed or purified.

Purity:

> 90 % as determined by Bis-Tris PAGE, anti-tag ELISA, Western Blot and analytical SEC (HPLC)

Grade:

custom-made

Target Details

FITM1

Alternative Name: IFITM1 (IFITM1 Products)

Background:

(Interferon-induced protein 17) (Interferon-inducible protein 9-27) (Leu-13 antigen) (CD antigen CD225), FUNCTION: IFN-induced antiviral protein which inhibits the entry of viruses to the host cell cytoplasm, permitting endocytosis, but preventing subsequent viral fusion and release of viral contents into the cytosol. Active against multiple viruses, including influenza A virus, SARS coronaviruses (SARS-CoV and SARS-CoV-2), Marburg virus (MARV), Ebola virus (EBOV), Dengue virus (DNV), West Nile virus (WNV), human immunodeficiency virus type 1 (HIV-1) and hepatitis C virus (HCV) (PubMed:26354436, PubMed:33270927). Can inhibit: influenza virus hemagglutinin protein-mediated viral entry, MARV and EBOV GP1,2-mediated viral entry and

Interferon-induced transmembrane protein 1 (Dispanin subfamily A member 2a) (DSPA2a)

of IFN-gamma either by inhibiting the ERK activation or by arresting cell growth in G1 phase in a p53-dependent manner. Acts as a positive regulator of osteoblast differentiation. In hepatocytes, IFITM proteins act in a coordinated manner to restrict HCV infection by targeting

SARS-CoV and SARS-CoV-2 S protein-mediated viral entry. Also implicated in cell adhesion and

mediated syncytia formation (PubMed:33051876). Plays a key role in the antiproliferative action

control of cell growth and migration (PubMed:33270927). Inhibits SARS-CoV-2 S protein-

the endocytosed HCV virion for lysosomal degradation (PubMed:26354436). IFITM2 and

IFITM3 display anti-HCV activity that may complement the anti-HCV activity of IFITM1 by

inhibiting the late stages of HCV entry, possibly in a coordinated manner by trapping the virion
in the endosomal pathway and targeting it for degradation at the lysosome
(PubMed:26354436). {ECO:0000269 PubMed:16847454, ECO:0000269 PubMed:20064371,
ECO:0000269 PubMed:20838853, ECO:0000269 PubMed:21177806,
ECO:0000269 PubMed:21253575, ECO:0000269 PubMed:21976647,
ECO:0000269 PubMed:22479637, ECO:0000269 PubMed:22634173,
ECO:0000269 PubMed:26354436, ECO:0000269 PubMed:33051876,
ECO:0000269 PubMed:33270927}.
14.0 kDa

Molecular Weight: 14.0 kDa

UniProt: P13164

Application Details

Application Notes:	We expect the protein to work for functional studies. As the protein has not been tested for
	functional studies yet we cannot offer a guarantee though.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months