

Datasheet for ABIN3093032

IFIT1 Protein (AA 1-478) (Strep Tag)



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Overview

Quantity:	1 mg
Target:	IFIT1
Protein Characteristics:	AA 1-478
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This IFIT1 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	<p>MSTNGDDHQV KDSLEQLRCH FTWELSIDDD EMPDLENRVL DQIEFLDTKY SVGIHNLLAY VKHLKGQNEE ALKSLKEAEN LMQEEHDNQA NVRLSVTWGN FAWMYHYMGR LAEAQTYLDK VENICKKLSN PFRYRMECPE IDCEEGWALL KCGGKNYERA KACFEKVLEV DPENPESSAG YASAYRLDG FKLATKNHKP FSLLPLRQAV RLNPDNNGYIK VLLALKLQDE GQEAEGEKYI EEALANMSSQ TYVFRYAAKF YRRKGSVDKA LELLKKALQE TPTSULLHHQ IGLCYKAQMI QIKEATKGQP RGQNREKLDK MIRSAIFHFE SAVEKKPTFE VAHLDLARMY IEAGNHRKAE ENFQKLLCMK PVVEETMQDI HFHYGRFQEF QKKSVDNAII HYLKAIKIEQ ASLTRDKSIN SLKKLVLRKL RRAKDLESLL SLLGFVYKLE GNMNEALEYY ERALRLAADF ENSVRQGP</p> <p>Sequence without tag. The proposed Strep-Tag is based on experience s 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.</p>

Product Details

Characteristics:	<div>Key Benefits:</div> <ul style="list-style-type: none">• Made in Germany - from design to production - by highly experienced protein experts.• Protein expressed with ALiCE® and purified in one-step affinity chromatography• These proteins are normally active (enzymatically functional) as our customers have reported (not tested by us and not guaranteed).• State-of-the-art algorithm used for plasmid design (Gene synthesis). <p>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.</p> <p>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.</p> <div>Expression System:</div> <ul style="list-style-type: none">• ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.• During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein! <div>Concentration:</div> <ul style="list-style-type: none">• The concentration of our recombinant proteins is measured using the absorbance at 280nm.• The protein's absorbance will be measured against its specific reference buffer.• We use the ExPASy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	IFIT1
Alternative Name:	IFIT1 (IFIT1 Products)
Background:	<p>Interferon-induced protein with tetratricopeptide repeats 1 (IFIT-1) (Interferon-induced 56 kDa protein) (IFI-56K) (P56),FUNCTION: Interferon-induced antiviral RNA-binding protein that specifically binds single-stranded RNA bearing a 5'-triphosphate group (PPP-RNA), thereby acting as a sensor of viral single-stranded RNAs and inhibiting expression of viral messenger RNAs. Single-stranded PPP-RNAs, which lack 2'-O-methylation of the 5' cap and bear a 5'-triphosphate group instead, are specific from viruses, providing a molecular signature to distinguish between self and non-self mRNAs by the host during viral infection. Directly binds PPP-RNA in a non-sequence-specific manner. Viruses evolved several ways to evade this restriction system such as encoding their own 2'-O-methylase for their mRNAs or by stealing host cap containing the 2'-O-methylation (cap snatching mechanism). Exhibits antiviral activity against several viruses including human papilloma and hepatitis C viruses.</p> <p>{ECO:0000269 PubMed:19008854, ECO:0000269 PubMed:19416887, ECO:0000269 PubMed:21976647, ECO:0000269 PubMed:23334420}.</p>
Molecular Weight:	55.4 kDa
UniProt:	P09914
Pathways:	Hepatitis C

Application Details

Application Notes:	In addition to the applications listed above we expect the protein to work for functional studies as well. As the protein has not been tested for functional studies yet we cannot offer a guarantee though.
Comment:	<p>ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from <i>Nicotiana tabacum</i> c.v.. This contains all the protein expression machinery needed to produce even the most difficult-to-express proteins, including those that require post-translational modifications.</p> <p>During lysate production, the cell wall and other cellular components that are not required for protein production are removed, leaving only the protein production machinery and the mitochondria to drive the reaction. During our lysate completion steps, the additional components needed for protein production (amino acids, cofactors, etc.) are added to produce something that functions like a cell, but without the constraints of a living system - all that's needed is the DNA that codes for the desired protein!</p>

Application Details

Restrictions: For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol Might differ depending on protein.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months