Datasheet for ABIN3092951

HERC5 Protein (AA 1-1024) (Strep Tag)

Go to Product page

Overview

Quantity:	250 µg
Target:	HERC5
Protein Characteristics:	AA 1-1024
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This HERC5 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MERRSRRKSR RNGRSTAGKA AATQPAKSPG AQLWLFPSAA GLHRALLRRV EVTRQLCCSP GRLAVLERGG AGVQVHQLLA GSGGARTPKC IKLGKNMKIH SVDQGAEHML ILSSDGKPFE YDNYSMKHLR FESILQEKKI IQITCGDYHS LALSKGGELF AWGQNLHGQL GVGRKFPSTT TPQIVEHLAG VPLAQISAGE AHSMALSMSG NIYSWGKNEC GQLGLGHTES KDDPSLIEGL DNQKVEFVAC GGSHSALLTQ DGLLFTFGAG KHGQLGHNST QNELRPCLVA ELVGYRVTQI ACGRWHTLAY VSDLGKVFSF GSGKDGQLGN GGTRDQLMPL PVKVSSSEEL KLESHTSEKE LIMIAGGNQS ILLWIKKENS YVNLKRTIPT LNEGTVKRWI ADVETKRWQS TKREIQEIFS SPACLTGSFL RKRRTTEMMP VYLDLNKARN IFKELTQKDW ITNMITTCLK DNLLKRLPFH SPPQEALEIF FLLPECPMMH ISNNWESLVV PFAKVVCKMS DQSSLVLEEY WATLQESTFS KLVQMFKTAV ICQLDYWDES AEENGNVQAL LEMLKKLHRV NQVKCQLPES IFQVDELLHR LNFFVEVCRR YLWKMTVDAS ENVQCCVIFS HFPFIFNNLS KIKLLHTDTL LKIESKKHKA

YLRSAAIEEE RESEFALRPT FDLTVRRNHL IEDVLNQLSQ FENEDLRKEL WVSFSGEIGY DLGGVKKEFF YCLFAEMIQP EYGMFMYPEG ASCMWFPVKP KFEKKRYFFF GVLCGLSLFN CNVANLPFPL ALFKKLLDQM PSLEDLKELS PDLGKNLQTL LDDEGDNFEE VFYIHFNVHW DRNDTNLIPN GSSITVNQTN KRDYVSKYIN YIFNDSVKAV YEEFRRGFYK MCDEDIIKLF HPEELKDVIV GNTDYDWKTF EKNARYEPGY NSSHPTIVMF WKAFHKLTLE EKKKFLVFLT GTDRLQMKDL NNMKITFCCP ESWNERDPIR ALTCFSVLFL PKYSTMETVE EALQEAINNN RGFG

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.

Characteristics:

Key Benefits:

- 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).

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.
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.

Expression System:

- ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum 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!

Concentration:

- 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.

Product Details

- 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:	HERC5
Alternative Name:	HERC5 (HERC5 Products)
Background:	E3 ISG15--protein ligase HERC5 (EC 2.3.2.-) (Cyclin-E-binding protein 1) (HECT domain and RCC1-like domain-containing protein 5),FUNCTION: Major E3 ligase for ISG15 conjugation (PubMed:26355087, PubMed:27564865, PubMed:27534820, PubMed:34572049, PubMed:37279284). Acts as a positive regulator of innate antiviral response in cells induced by interferon. Functions as part of the ISGylation machinery that recognizes target proteins in a broad and relatively non-specific manner. Catalyzes ISGylation of IRF3 which results in sustained activation, it attenuates IRF3-PIN1 interaction, which antagonizes IRF3 ubiquitination and degradation, and boosts the antiviral response. Mediates ISGylation of the phosphatase PTEN leading to its degradation, thus alleviating its suppression of the PI3K-AKT signaling pathway and promoting the production of cytokines that facilitate bacterial clearance (PubMed:37279284). Interferes with the function of key viral structural proteins such as ebolavirus structural protein VP40 or HIV-1 protein GAG (PubMed:22093708, PubMed:34572049). Catalyzes ISGylation of influenza A viral NS1 which attenuates virulence, ISGylated NS1 fails to form homodimers and thus to interact with its RNA targets. Catalyzes ISGylation of papillomavirus type 16 L1 protein which results in dominant-negative effect on virus infectivity. Physically associated with polyribosomes, broadly modifies newly synthesized proteins in a cotranslational manner. In an interferon-stimulated cell, newly translated viral proteins are primary targets of ISG15. Promotes parkin/PRKN ubiquitin E3 ligase activity by suppressing the intramolecular interaction that maintains its autoinhibited conformation (PubMed:27534820). {ECO:0000269|PubMed:16407192, ECO:0000269|PubMed:16815975, ECO:0000269|PubMed:16884686, ECO:0000269|PubMed:20133869, ECO:0000269|PubMed:20308324, ECO:0000269|PubMed:20385878, ECO:0000269|PubMed:20542004, ECO:0000269|PubMed:22093708,

Target Details

	ECO:0000269|PubMed:26355087, ECO:0000269|PubMed:27534820, ECO:0000269|PubMed:27564865, ECO:0000269|PubMed:34572049, ECO:0000269|PubMed:37279284}., FUNCTION: (Microbial infection) Functions as an E3 ligase for ISGylation of hepatitis B virus protein X leading to enhanced viral replication due to increased interferon resistance. {ECO:0000269|PubMed:34661519}.
Molecular Weight:	116.9 kDa
UniProt:	Q9UII4

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:	ALiCE®, our Almost Living Cell-Free Expression System is based on a lysate obtained from Nicotiana tabacum 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!
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