Datasheet for ABIN3094311

OPTN Protein (AA 1-577) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	OPTN
Protein Characteristics:	AA 1-577
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This OPTN protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MSHQPLSCLT EKEDSPSEST GNGPPHLAHP NLDTFTPEEL LQQMKELLTE NHQLKEAMKL NNQAMKGRFE ELSAWTEKQK EERQFFEIQS KEAKERLMAL SHENEKLKEE LGKLKGKSER SSEDPTDDSR LPRAEAEQEK DQLRTQVVRL QAEKADLLGI VSELQLKLNS SGSSEDSFVE IRMAEGEAEG SVKEIKHSPG PTRTVSTGTA LSKYRSRSAD GAKNYFEHEE LTVSQLLLCL REGNQKVERL EVALKEAKER VSDFEKKTSN RSEIETQTEG STEKENDEEK GPETVGSEVE ALNLQVTSLF KELQEAHTKL SEAELMKKRL QEKCQALERK NSAIPSELNE KQELVYTNKK LELQVESMLS EIKMEQAKTE DEKSKLTVLQ MTHNKLLQEH NNALKTIEEL TRKESEKVDR AVLKELSEKL ELAEKALASK QLQMDEMKQT IAKQEEDLET MTILRAQMEV YCSDFHAERA AREKIHEEKE QLALQLAVLL KENDAFEDGG RQSLMEMQSR HGARTSDSDQ QAYLVQRGAE DRDWRQQRNI PIHSCPKCGE VLPDIDTLQI HVMDCII **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. • 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:	OPTN
Alternative Name:	OPTN (OPTN Products)
Background:	Optineurin (E3-14.7K-interacting protein) (FIP-2) (Huntingtin yeast partner L) (Huntingtin-interacting protein 7) (HIP-7) (Huntingtin-interacting protein L) (NEMO-related protein) (Optic neuropathy-inducing protein) (Transcription factor IIIA-interacting protein) (TFIIIA-IntP),FUNCTION: Plays an important role in the maintenance of the Golgi complex, in membrane trafficking, in exocytosis, through its interaction with myosin VI and Rab8 (PubMed:27534431). Links myosin VI to the Golgi complex and plays an important role in Golgi ribbon formation (PubMed:27534431). Plays a role in the activation of innate immune response during viral infection. Mechanistically, recruits TBK1 at the Golgi apparatus, promoting its trans-phosphorylation after RLR or TLR3 stimulation (PubMed:27538435). In turn, activated TBK1 phosphorylates its downstream partner IRF3 to produce IFN-beta/IFNB1. Plays a neuroprotective role in the eye and optic nerve. May act by regulating membrane trafficking and cellular morphogenesis via a complex that contains Rab8 and hungtingtin (HD). Mediates the interaction of Rab8 with the probable GTPase-activating protein TBC1D17 during Rab8-mediated endocytic trafficking, such as that of transferrin receptor (TFRC/TfR), regulates Rab8 recruitment to tubules emanating from the endocytic recycling compartment (PubMed:22854040). Autophagy receptor that interacts directly with both the cargo to become degraded and an autophagy modifier of the MAP1 LC3 family, targets ubiquitin-coated bacteria (xenophagy), such as cytoplasmic Salmonella enterica, and appears to function in the same pathway as SQSTM1 and CALCOCO2/NDP52. {ECO:0000269|PubMed:11834836, ECO:0000269|PubMed:15837803, ECO:0000269|PubMed:20085643, ECO:0000269|PubMed:20174559, ECO:0000269|PubMed:21617041, ECO:0000269|PubMed:22854040, ECO:0000269|PubMed:27534431, ECO:0000269|PubMed:27538435}., FUNCTION: (Microbial infection) May constitute a cellular target for various viruses, such as adenovirus E3 14.7 or Bluetongue virus, to inhibit innate immune response (PubMed:9488477, PubMed:27538435). During RNA virus infection, such as that of Sendai virus, negatively regulates the induction of IFNB1 (PubMed:20174559). {ECO:0000269|PubMed:20174559, ECO:0000269|PubMed:27538435, ECO:0000269|PubMed:9488477}.
Molecular Weight:	65.9 kDa
UniProt:	Q96CV9
Pathways:	M Phase

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