Datasheet for ABIN3094135

NOS2 Protein (AA 1-1153) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	NOS2
Protein Characteristics:	AA 1-1153
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This NOS2 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS), ELISA

Product Details

Brand:	AliCE®
Sequence:	MACPWKFLFK TKFHQYAMNG EKDINNNVEK APCATSSPVT QDDLQYHNLS KQQNESPQPL VETGKKSPES LVKLDATPLS SPRHVRIKNW GSGMTFQDTL HHKAKGILTC RSKSCLGSIM TPKSLTRGPR DKPTPPDELL PQAIEFVNQY YGSFKEAKIE EHLARVEAVT KEIETTGTYQ LTGDELIFAT KQAWRNAPRC IGRIQWSNLQ VFDARSCSTA REMFEHICRH VRYSTNNGNI RSAITVFPQR SDGKHDFRVW NAQLIRYAGY QMPDGSIRGD PANVEFTQLC IDLGWKPKYG RFDVVPLVLQ ANGRDPELFE IPPDLVLEVA MEHPKYEWFR ELELKWYALP AVANMLLEVG GLEFPGCPFN GWYMGTEIGV RDFCDVQRYN ILEEVGRRMG LETHKLASLW KDQAVVEINI AVLHSFQKQN VTIMDHHSAA ESFMKYMQNE YRSRGGCPAD WIWLVPPMSG SITPVFHQEM LNYVLSPFYY YQVEAWKTHV WQDEKRRPKR REIPLKVLVK AVLFACMLMR KTMASRVRVT ILFATETGKS EALAWDLGAL FSCAFNPKVV CMDKYRLSCL EEERLLLVVT STFGNGDCPG NGEKLKKSLF MLKELNNKFR YAVFGLGSSM YPRFCAFAHD IDQKLSHLGA SQLTPMGEGD

ELSGQEDAFR SWAVQTFKAA CETFDVRGKQ HIQIPKLYTS NVTWDPHHYR LVQDSQPLDL SKALSSMHAK NVFTMRLKSR QNLQSPTSSR ATILVELSCE DGQGLNYLPG EHLGVCPGNQ PALVQGILER VVDGPTPHQT VRLEALDESG SYWVSDKRLP PCSLSQALTY FLDITTPPTQ LLLQKLAQVA TEEPERQRLE ALCQPSEYSK WKFTNSPTFL EVLEEFPSLR VSAGFLLSQL PILKPRFYSI SSSRDHTPTE IHLTVAVVTY HTRDGQGPLH HGVCSTWLNS LKPQDPVPCF VRNASGFHLP EDPSHPCILI GPGTGIAPFR SFWQQRLHDS QHKGVRGGRM TLVFGCRRPD EDHIYQEEML EMAQKGVLHA VHTAYSRLPG KPKVYVQDIL RQQLASEVLR VLHKEPGHLY VCGDVRMARD VAHTLKQLVA AKLKLNEEQV EDYFFQLKSQ KRYHEDIFGA VFPYEAKKDR VAVQPSSLEM SAL

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!

Product Details

	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:	NOS2
Alternative Name:	NOS2 (NOS2 Products)
Background:	Nitric oxide synthase, inducible (EC 1.14.13.39) (Hepatocyte NOS) (HEP-NOS) (Inducible NO synthase) (Inducible NOS) (iNOS) (NOS type II) (Peptidyl-cysteine S-nitrosylase NOS2),FUNCTION: Produces nitric oxide (NO) which is a messenger molecule with diverse functions throughout the body (PubMed:7531687, PubMed:7544004, PubMed:7682706, PubMed:7504305). In macrophages, NO mediates tumoricidal and bactericidal actions. Also has nitrosylase activity and mediates cysteine S-nitrosylation of cytoplasmic target proteins such PTGS2/COX2 (By similarity). As component of the iNOS-S100A8/9 transnitrosylase complex involved in the selective inflammatory stimulus-dependent S-nitrosylation of GAPDH on 'Cys-247' implicated in regulation of the GAIT complex activity and probably multiple targets including ANXA5, EZR, MSN and VIM (PubMed:25417112). Involved in inflammation, enhances the synthesis of pro-inflammatory mediators such as IL6 and IL8 (PubMed:19688109). {ECO:0000250|UniProtKB:P29477, ECO:0000269|PubMed:19688109, ECO:0000269|PubMed:25417112, ECO:0000269|PubMed:7504305, ECO:0000269|PubMed:7531687, ECO:0000269|PubMed:7544004, ECO:0000269|PubMed:7682706}.
Molecular Weight:	131.1 kDa
UniProt:	P35228
Pathways:	Retinoic Acid Receptor Signaling Pathway, Cellular Response to Molecule of Bacterial Origin, Inositol Metabolic Process, Regulation of Leukocyte Mediated Immunity, Positive Regulation of Immune Effector Process

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