Datasheet for ABIN3136013

PUM2 Protein (AA 1-1066) (Strep Tag)

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Overview

Quantity:	1 mg
Target:	PUM2
Protein Characteristics:	AA 1-1066
Origin:	Mouse
Source:	Tobacco (Nicotiana tabacum)
Protein Type:	Recombinant
Purification tag / Conjugate:	This PUM2 protein is labelled with Strep Tag.
Application:	ELISA, Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Sequence:	MNHDFQALAL ESRGMGELLP TKKFWEPDDS TKDGQKGIFL GDDEWRETAW GTSHHSMSQP IMVQRRSGQS FHGNSEVNAI LSPRSESGGL GVSMVEYVLS SSPADKLDSR FRKGTFGTRD AETDGPEKGD QKGKASPFEE DQNRDLKQDD EDSKINGRGL PNGMDADCKD FNRTPGSRQA SPTEVVERLG PSTNPPEGLG PLPNPTANKP LVEEFSNPET QNLDAMDQVG LDSLQFDYPG NQVPMDSSGA TVGLFDYNSQ QQLFQRTSAL TVQQLTAAQQ QQYALAAAQQ PHIAGVFSAG LAPAAFVPNP YIISAAPPGT DPYTAAGLAA AATLAGPAVV PPQYYGVPWG VYPANLFQQQ AAAAASNTAN QQAASQAQPG QQQVLRPGAG QRPITPSQGQ QGQQAESLAA AANPTLAFGQ SLAAGMPGYQ VLAPTAYYDQ TGALVVGPGA RTGLGAPVRL MAPTPVLISS TAAQAAAAAA AAGGTANSLT GSTNGLFRPI GTQPPQQQQQ QQQPSTNLQS NSFYGSSSLT NSSQSSSLFS HGPGQPGSAS LGFGSGSSLG AAIGSALSGF GSSVGSSASS SATRRESLST SSDLYKRSSS SLAPIGQPFY NSLGFSSSPS PIGMPLPSQT PGHSLTPPPS LSSHGSSSSL HLGGLTNGSG RYISAAPGAE AKYRSASSTS SLFSSSSQLF PPSRLRYNRS DIMPSGRSRL LEDFRNNRFP

NLQLRDLIGH IVEFSQDQHG SRFIQQKLER ATPAERQIVF NEILQAAYQL MTDVFGNYVI QKFFEFGSLD QKLALATRIR GHVLPLALQM YGCRVIQKAL ESISSDQQVI SEMVKELDGH VLKCVKDQNG NHVVQKCIEC VQPQSLQFII DAFKGQVFVL STHPYGCRVI QRILEHCTAE QTLPILEELH QHTEQLVQDQ YGNYVIQHVL EHGRPEDKSK IVSEIRGKVL ALSQHKFASN VVEKCVTHAS RAERALLIDE VCCQNDGPHS ALYTMMKDQY ANYVVQKMID MAEPAQRKII MHKIRPHITT LRKYTYGKHI LAKLEKYYLK NSPDLGPIGG PPNGML

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 by multi-step, protein-specific process to ensure correct folding and modification.
- 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 will ensure that you receive a correctly folded 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.

Product Details

	• The protein's absorbance will be measured in several dilutions and is measured against its specific reference buffer. • We use the Expasy's protparam tool to determine the absorption coefficient of each protein.
Purification:	Two step purification of proteins expressed in Almost Living Cell-Free Expression System (ALiCE®): 1. In a first purification step, the protein is purified from the cleared cell lysate using StrepTag capture material. Eluate fractions are analyzed by SDS-PAGE. 2. Protein containing fractions of the best purification are subjected to second purification step through size exclusion chromatography. Eluate fractions are analyzed by SDS-PAGE and Western blot.
Purity:	≥ 80 % as determined by SDS PAGE, Size Exclusion Chromatography and Western Blot.
Endotoxin Level:	Low Endotoxin less than 1 EU/mg (< 0.1 ng/mg)

Target Details

Target:	PUM2
Alternative Name:	Pum2 (PUM2 Products)
Background:	Pumilio homolog 2,FUNCTION: Sequence-specific RNA-binding protein that acts as a post-transcriptional repressor by binding the 3'-UTR of mRNA targets. Binds to an RNA consensus sequence, the Pumilio Response Element (PRE), 5'-UGUANAUA-3', that is related to the Nanos Response Element (NRE). Mediates post-transcriptional repression of transcripts via different mechanisms: acts via direct recruitment of the CCR4-POP2-NOT deadenylase leading to translational inhibition and mRNA degradation. Also mediates deadenylation-independent repression by promoting accessibility of miRNAs. Acts as a post-transcriptional repressor of E2F3 mRNAs by binding to its 3'-UTR and facilitating miRNA regulation. Plays a role in cytoplasmic sensing of viral infection. Represses a program of genes necessary to maintain genomic stability such as key mitotic, DNA repair and DNA replication factors. Its ability to repress those target mRNAs is regulated by the lncRNA NORAD (non-coding RNA activated by DNA damage) which, due to its high abundance and multitude of PUMILIO binding sites, is able to sequester a significant fraction of PUM1 and PUM2 in the cytoplasm. May regulate DCUN1D3 mRNA levels. May support proliferation and self-renewal of stem cells. Binds specifically to miRNA MIR199A precursor, with PUM1, regulates miRNA MIR199A expression at a postranscriptional level (By similarity). {ECO:0000250|UniProtKB:Q8TB72}.
Molecular Weight:	114.3 kDa

Target Details

UniProt:	Q80U58
Pathways:	Ribonucleoprotein Complex Subunit Organization

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. If you have a special request, please contact us.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	Unlimited (if stored properly)