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Datasheet for ABIN3136978
TDRD1 Protein (AA 1-1172) (Strep Tag)

Overview

Quantity:	1 mg
Target:	TDRD1
Protein Characteristics:	AA 1-1172
Origin:	Mouse
Source:	Tobacco (<i>Nicotiana tabacum</i>)
Protein Type:	Recombinant
Purification tag / Conjugate:	This TDRD1 protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Sequence: MPMRNNLEAS TCKMAEPFNF EKESKPPPQ DPLRSPVAQH NHPTFRLKSP ENGNTKNNFL
LCEQNKQYLA SQEDSSVSS NPAVVNGEVG GSKGDRKPPP TGNPVSPSL GNSSPPNQVK
TKPSSNVTPE KSKKSHKLF NALSVNNPAL FNSLGPPLRS TTCHRCGLFG SLRCSQCKQT
YYCSTACQRR DWSSHSTICR PVQQSLNKLE DNKSPFETKA IEVKSEVDCP PGVTKEITAG
AERVMFSDLR SLQLKKTMEI KGTVTEFKHP SNFYIQLYSS EVLENMNQLS TSLKETYANV
VPEDGYLPVK GEVCVAKYTV DQTNWRAIVQ AVDLVQRKAH VLYIDYGNEE MIPIDSVHPL
SRGLDLFPPS AIKCCVSGVI PTAGEWSEGC VAAVKALLFE QFCSVKVMDI LEEVLTCAV
DLVLQSSGKQ LDHVLVEMGY GVKPGEQSST EQSVDHSALE DVGRVTVESK IVTRNALIP
KVLTLNVGDE FCGVVAHIQT PEDFFCQQLQ SGHKLAELQE SLSEYCGHVI PRSDFYPTIG
DVCCAQFSED DQWYRASVLA YASEESVLVG YVDYGNFEIL SLKRLCPIIP KLLDLPMQAL
NCVLAGVKPS LGIWTPEAVC VMKEMVQNRM VTVRVVGMGLG TRALVELIDK SVAPHVSASK
ALIDSGFAIK EKDVADKGSS MHTASVPLAI EGPAEALWT WVEFTVDETV DVVVCMMYSP

GEFYCHFLKD DALEKLDDLN QSLADYCAQK PPNGFKAEIG RPCCAFFSGD GNWYRALVKE
ILPSGNVKVH FVDYGNVEEV TTDQLQAILP QLLLLPFQGM QCWLVDIQPP NKHWTKEATA
RFQACVVGLK LQARVEITA NGVGVELTDL STPYPKIISD VLIREQLVLR CGSPQDSLMS
RPAHQHKQID SHRVQASPSA EQWKTMELPV NKTIAANVLE IISPALFYAI PSEMSENQEK
LCVLAELLE HCNAQKGQPA YRPRTGDACC AKYTNDDFWY RAIVLETSES DVKVLADYD
NIETLPLSRV QPIPASHLEL PFQIIRCSLE GPMELNGSCS QLMELLRNA MLNQSVVLSV
KAISKNVHAV SVEKCENGM INIAENLVMC GLAENLTSKR KSASTKEIPH SRDCCCTELQ
KQIEKHEQIL LFLNNPTNQ SKFTEMKLL RS

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!

Product Details

Concentration:

- The concentration of our recombinant proteins is measured using the absorbance at 280nm.
- 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:

TDRD1

Alternative Name:

Tdrd1 ([TDRD1 Products](#))

Background:

Tudor domain-containing protein 1,FUNCTION: Plays a central role during spermatogenesis by participating in the repression transposable elements and preventing their mobilization, which is essential for the germline integrity. Acts via the piRNA metabolic process, which mediates the repression of transposable elements during meiosis by forming complexes composed of piRNAs and Piwi proteins and governs the methylation and subsequent repression of transposons. Required for the localization of Piwi proteins to the meiotic nuage. Involved in the piRNA metabolic process by ensuring the entry of correct transcripts into the normal piRNA pool and limiting the entry of cellular transcripts into the piRNA pathway. May act by allowing the recruitment of piRNA biogenesis or loading factors that ensure the correct entry of transcripts and piRNAs into Piwi proteins. {ECO:0000269|PubMed:17038506, ECO:0000269|PubMed:19465913, ECO:0000269|PubMed:19584108}.

Molecular Weight:

129.7 kDa

UniProt:

[Q99MV1](#)

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)
