Datasheet for ABIN7564325

Transportin 1 Protein (TNPO1) (AA 1-898) (His tag)

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Overview

Quantity:	1 mg
Target:	Transportin 1 (TNPO1)
Protein Characteristics:	AA 1-898
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This Transportin 1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Tnpo1 Protein expressed in mammalien cells.
Sequence:	MVWDRQTKME YEWKPDEQGL QQILQLLKES QSPDTTIQRT VQQKLEQLNQ YPDFNNYLIF VLTKLKSEDE PTRSLSGLIL KNNVKAHFQN FPNGVTDFIK SECLNNIGDS SPLIRATVGI LITTIASKGE LQNWPDLLPK LCSLLDSEDY NTCEGAFGAL QKICEDSAEI LDSDVLDRPL NIMIPKFLQF FKHSSPKIRS HAVACVNQFI ISRTQALMLH IDSFIENLFA LAGDEEAEVR KNVCRALVML LEVRMDRLLP HMHNIVEYML QRTQDQDENV ALEACEFWLT LAEQPICKDV LVRHLPKLIP VLVNGMKYSD IDIILLKGDV EEDETIPDSE QDIRPRFHRS RTVAQQHEED GIEEEDDDDD EIDDDDTISD WNLRKCSAAA LDVLANVYRD ELLPHILPLL KELLFHHEWV VKESGILVLG AIAEGCMQGM IPYLPELIPH LIQCLSDKKA LVRSITCWTL SRYAHWVVSQ PPDTYLKPLM TELLKRILDS NKRVQEAACS AFATLEEEAC TELVPYLAYI LDTLVFAFSK YQHKNLLILY DAIGTLADSV GHHLNKPEYI QMLMPPLIQK WNMLKDEDKD LFPLLECLSS VATALQSGFL PYCEPVYQRC VNLVQKTLAQ AMLNNAQPEQ YEAPDKDFMI VALDLLSGLA

Product Details

	EGLGGNIEQL VARSNILTLM YQCMQDKMPE VRQSSFALLG DLTKACFQHV KPCIADFMPI LGTNLNPEFI SVCNNATWAI GEISIQMGIE MQPYIPMVLH QLVEIINRPN TPKTLLENTA ITIGRLGYVC PQEVAPMLQQ FIRPWCTSLR NIRDNEEKDS AFRGICTMIS VNPSGVIQDF IFFCDAVASW INPKDDLRDM FCKILHGFKN QVGDENWRRF SDQFPLPLKE RLAAFYGV **Sequence without tag. The proposed Purification-Tag is based on experiences 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 to order protein - from design to production - by highly experienced protein experts. • Protein expressed in mammalien cells and purified in one-step affinity chromatography • The optimized expression system ensures reliability for intracellular, secreted and transmembrane proteins. • 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. If you are not interested in a full length protein, please contact us for individual protein fragments. 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.
Purity:	> 90 % as determined by Bis-Tris Page, Western Blot
Grade:	custom-made

Target Details

Target:	Transportin 1 (TNPO1)
Alternative Name:	Tnpo1 (TNPO1 Products)
Background:	Transportin-1 (Importin beta-2) (Karyopherin beta-2),FUNCTION: Functions in nuclear protein import as nuclear transport receptor. Serves as receptor for nuclear localization signals (NLS) in cargo substrates (PubMed:11493596). May mediate docking of the importin/substrate complex to the nuclear pore complex (NPC) through binding to nucleoporin and the complex is subsequently translocated through the pore by an energy requiring, Ran-dependent mechanism. At the nucleoplasmic side of the NPC, Ran binds to the importin, the

Target Details

	importin/substrate complex dissociates and importin is re-exported from the nucleus to the cytoplasm where GTP hydrolysis releases Ran. The directionality of nuclear import is thought to be conferred by an asymmetric distribution of the GTP- and GDP-bound forms of Ran between the cytoplasm and nucleus (By similarity). Involved in nuclear import of M9-containing proteins. In vitro, binds directly to the M9 region of the heterogeneous nuclear ribonucleoproteins (hnRNP), A1 and A2 and mediates their nuclear import. Involved in hnRNP A1/A2 nuclear export. Mediates the nuclear import of ribosomal proteins RPL23A, RPS7 and RPL5 (By similarity). In vitro, mediates nuclear import of SRP19 (By similarity). Mediates the import of histones H2A, H2B, H3 and H4 (PubMed:11493596). Mediates nuclear import of ADAR/ADAR1 in a RanGTP-dependent manner (By similarity). {ECO:0000250|UniProtKB:Q92973, ECO:0000269|PubMed:11493596}.
Molecular Weight:	102.4 kDa
UniProt:	Q8BFY9
Pathways:	PI3K-Akt Signaling, Fc-epsilon Receptor Signaling Pathway, EGFR Signaling Pathway, Neurotrophin Signaling Pathway, Cellular Glucan Metabolic Process, Protein targeting to Nucleus, CXCR4-mediated Signaling Events

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.
Restrictions:	For Research Use only

Handling

Format:	Liquid
Buffer:	The buffer composition is at the discretion of the manufacturer.
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months