Datasheet for ABIN7565122

PIWIL1 Protein (AA 1-862) (His tag)

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Overview

Quantity:	1 mg
Target:	PIWIL1
Protein Characteristics:	AA 1-862
Origin:	Mouse
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This PIWIL1 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat Piwil1 Protein expressed in mammalien cells.
Sequence:	MTGRARARAR GRARGQETVQ HVGAAASQQP GYIPPRPQQS PTEGDLVGRG RQRGMVVGAT SKSQELQISA GFQELSLAER GGRRRDFHDL GVNTRQNLDH VKESKTGSSG IIVKLSTNHF RLTSRPQWAL YQYHIDYNPL MEARRLRSAL LFQHEDLIGR CHAFDGTILF LPKRLQHKVT EVFSQTRNGE HVRITITLTN ELPPTSPTCL QFYNIIFRRL LKIMNLQQIG RNYYNPSDPI DIPNHRLVIW PGFTTSILQY ENNIMLCTDV SHKVLRSETV LDFMFNLYQQ TEEHKFQEQV SKELIGLIVL TKYNNKTYRV DDIDWDQNPK STFKKADGSE VSFLEYYRKQ YNQEITDLKQ PVLVSQPKRR RGPGGTLPGP AMLIPELCYL TGLTDKMRND FNVMKDLAVH TRLTPEQRQR EVGRLIDYIH KDDNVQRELR DWGLSFDSNL LSFSGRILQS EKIHQGGKTF DYNPQFADWS KETRGAPLIS VKPLDNWLLI YTRRNYEAAN SLIQNLFKVT PAMGIQMKKA IMIEVDDRTE AYLRALQQKV TSDTQIVVCL LSSNRKDKYD AIKKYLCTDC PTPSQCVVAR TLGKQQTVMA IATKIALQMN CKMGGELWRV DMPLKLAMIV GIDCYHDTTA GRRSIAGFVA SINEGMTRWF

Product Details

	SRCVFQDRGQ ELVDGLKVCL QAALRAWSGC NEYMPSRVIV YRDGVGDGQL KTLVNYEVPQ FLDCLKSVGR GYNPRLTVIV VKKRVNARFF AQSGGRLQNP LPGTVIDVEV TRPEWYDFFI VSQAVRSGSV SPTHYNVIYD SSGLKPDHIQ RLTYKLCHVY YNWPGVIRVP APCQYAHKLA FLVGQSIHRE PNLSLSNRLY YL **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:	PIWIL1
Alternative Name:	Piwil1 (PIWIL1 Products)
Background:	Piwi-like protein 1 (EC 3.1.26.-),FUNCTION: Endoribonuclease that plays a central role in postnatal germ cells by repressing transposable elements and preventing their mobilization, which is essential for the germline integrity (PubMed:11578866, PubMed:22121019, PubMed:21237665). 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 (PubMed:11578866, PubMed:22121019, PubMed:21237665). Directly binds methylated piRNAs,

Target Details

	a class of 24 to 30 nucleotide RNAs that are generated by a Dicer-independent mechanism and are primarily derived from transposons and other repeated sequence elements (PubMed:11578866, PubMed:22121019, PubMed:21237665). Strongly prefers a uridine in the first position of their guide (g1U preference, also named 1U-bias) (PubMed:24757166). Not involved in the piRNA amplification loop, also named ping-pong amplification cycle (PubMed:22121019). Acts as an endoribonuclease that cleaves transposon messenger RNAs (PubMed:22121019). Besides their function in transposable elements repression, piRNAs are probably involved in other processes during meiosis such as translation regulation (PubMed:16938833). Probable component of some RISC complex, which mediates RNA cleavage and translational silencing (PubMed:16938833). Also plays a role in the formation of chromatoid bodies and is required for some miRNAs stability (PubMed:16787948). Required to sequester RNF8 in the cytoplasm until late spermatogenesis, RNF8 being released upon ubiquitination and degradation of PIWIL1 (PubMed:28552346). {ECO:0000269|PubMed:11578866, ECO:0000269|PubMed:16787948, ECO:0000269|PubMed:16938833, ECO:0000269|PubMed:21237665, ECO:0000269|PubMed:22121019, ECO:0000269|PubMed:24757166, ECO:0000269|PubMed:28552346}.
Molecular Weight:	98.6 kDa
UniProt:	Q9JMB7

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.

Handling

Expiry Date:	12 months