Datasheet for ABIN7552132

APLF Protein (AA 1-511) (His tag)

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Overview

Quantity:	1 mg
Target:	APLF
Protein Characteristics:	AA 1-511
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This APLF protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Product Details

Purpose:	Custom-made recombinat APLF Protein expressed in mammalien cells.
Sequence:	MSGGFELQPR DGGPRVALAP GETVIGRGPL LGITDKRVSR RHAILEVAGG QLRIKPIHTN PCFYQSSEKS QLLPLKPNLW CYLNPGDSFS LLVDKYIFRI LSIPSEVEMQ CTLRNSQVLD EDNILNETPK SPVINLPHET TGASQLEGST EIAKTQMTPT NSVSFLGENR DCNKQQPILA ERKRILPTWM LAEHLSDQNL SVPAISGGNV IQGSGKEEIC KDKSQLNTTQ QGRRQLISSG SSENTSAEQD TGEECKNTDQ EESTISSKEM PQSFSAITLS NTEMNNIKTN AQRNKLPIEE LGKVSKHKIA TKRTPHKEDE AMSCSENCSS AQGDSLQDES QGSHSESSSN PSNPETLHAK ATDSVLQGSE GNKVKRTSCM YGANCYRKNP VHFQHFSHPG DSDYGGVQIV GQDETDDRPE CPYGPSCYRK NPQHKIEYRH NTLPVRNVLD EDNDNVGQPN EYDLNDSFLD DEEEDYEPTD EDSDWEPGKE DEEKEDVEEL LKEAKRFMKR K **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**

Product Details

	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:	APLF
Alternative Name:	APLF (APLF Products)
Background:	Aprataxin and PNK-like factor (EC 3.1.-.-) (Apurinic-apyrimidinic endonuclease APLF) (PNK and APTX-like FHA domain-containing protein) (XRCC1-interacting protein 1),FUNCTION: Histone chaperone involved in single-strand and double-strand DNA break repair (PubMed:17353262, PubMed:17396150, PubMed:21211721, PubMed:21211722, PubMed:30104678, PubMed:29905837). Recruited to sites of DNA damage through interaction with branched poly-ADP-ribose chains, a polymeric post-translational modification synthesized transiently at sites of chromosomal damage to accelerate DNA strand break repair reactions (PubMed:17353262, PubMed:17396150, PubMed:21211721, PubMed:30104678). Following recruitment to DNA damage sites, acts as a histone chaperone that mediates histone eviction during DNA repair and promotes recruitment of histone variant MACROH2A1 (PubMed:21211722, PubMed:30104678, PubMed:29905837). Also has a nuclease activity: displays apurinic-apyrimidinic (AP) endonuclease and 3'-5' exonuclease activities in vitro (PubMed:17353262,

Target Details

	PubMed:17396150). Also able to introduce nicks at hydroxyuracil and other types of pyrimidine base damage (PubMed:17353262, PubMed:17396150). Together with PARP3, promotes the retention of the LIG4-XRCC4 complex on chromatin and accelerate DNA ligation during non-homologous end-joining (NHEJ) (PubMed:21211721, PubMed:23689425). Also acts as a negative regulator of cell pluripotency by promoting histone exchange (By similarity). Required for the embryo implantation during the epithelial to mesenchymal transition in females (By similarity). {ECO:0000250|UniProtKB:Q9D842, ECO:0000269|PubMed:17353262, ECO:0000269|PubMed:17396150, ECO:0000269|PubMed:21211721, ECO:0000269|PubMed:21211722, ECO:0000269|PubMed:23689425, ECO:0000269|PubMed:29905837, ECO:0000269|PubMed:30104678}.
Molecular Weight:	57.0 kDa
UniProt:	Q8IW19
Pathways:	DNA Damage Repair

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