Datasheet for ABIN7551939

AKAP8 Protein (AA 1-692) (His tag)

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Overview

Quantity:	1 mg
Target:	AKAP8
Protein Characteristics:	AA 1-692
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This AKAP8 protein is labelled with His tag.
Application:	Western Blotting (WB), SDS-PAGE (SDS)

Product Details

Purpose:	Custom-made recombinat AKAP8 Protein expressed in mammalien cells.
Sequence:	MDQGYGGYGA WSAGPANTQG AYGTGVASWQ GYENYNYYGA QNTSVTTGAT YSYGPASWEA AKANDGGLAA GAPAMHMASY GPEPCTDNSD SLIAKINQRL DMMSKEGGRG GSGGGGEGIQ DRESSFRFQP FESYDSRPCL PEHNPYRPSY SYDYEFDLGS DRNGSFGGQY SECRDPARER GSLDGFMRGR GQGRFQDRSN PGTFMRSDPF VPPAASSEPL STPWNELNYV GGRGLGGPSP SRPPPSLFSQ SMAPDYGVMG MQGAGGYDST MPYGCGRSQP RMRDRDRPKR RGFDRFGPDG TGRKRKQFQL YEEPDTKLAR VDSEGDFSEN DDAAGDFRSG DEEFKGEDEL CDSGRQRGEK EDEDEDVKKR REKQRRRDRT RDRAADRIQF ACSVCKFRSF DDEEIQKHLQ SKFHKETLRF ISTKLPDKTV EFLQEYIVNR NKKIEKRRQE LMEKETAKPK PDPFKGIGQE HFFKKIEAAH CLACDMLIPA QPQLLQRHLH SVDHNHNRRL AAEQFKKTSL HVAKSVLNNR HIVKMLEKYL KGEDPFTSET VDPEMEGDDN LGGEDKKETP EEVAADVLAE VITAAVRAVD GEGAPAPESS GEPAEDEGPT DTAEAGSDPQ AEQLLEEQVP CGTAHEKGVP KARSEAAEAG NGAETMAAEA

Product Details

	ESAQTRVAPA PAAADAEVEQ TDAESKDAVP TE **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:	AKAP8
Alternative Name:	AKAP8 (AKAP8 Products)
Background:	A-kinase anchor protein 8 (AKAP-8) (A-kinase anchor protein 95 kDa) (AKAP 95),FUNCTION: Anchoring protein that mediates the subcellular compartmentation of cAMP-dependent protein kinase (PKA type II) (PubMed:9473338). Acts as an anchor for a PKA-signaling complex onto mitotic chromosomes, which is required for maintenance of chromosomes in a condensed form throughout mitosis. Recruits condensin complex subunit NCAPD2 to chromosomes required for chromatin condensation, the function appears to be independent from PKA-anchoring (PubMed:10601332, PubMed:10791967, PubMed:11964380). May help to deliver cyclin D/E to CDK4 to facilitate cell cycle progression (PubMed:14641107). Required for cell cycle G2/M transition and histone deacetylation during mitosis. In mitotic cells recruits HDAC3

Target Details

	to the vicinity of chromatin leading to deacetylation and subsequent phosphorylation at 'Ser-10' of histone H3, in this function may act redundantly with AKAP8L (PubMed:16980585). Involved in nuclear retention of RPS6KA1 upon ERK activation thus inducing cell proliferation (PubMed:22130794). May be involved in regulation of DNA replication by acting as scaffold for MCM2 (PubMed:12740381). Enhances HMT activity of the KMT2 family MLL4/WBP7 complex and is involved in transcriptional regulation. In a teratocarcinoma cell line is involved in retinoic acid-mediated induction of developmental genes implicating H3 'Lys-4' methylation (PubMed:23995757). May be involved in recruitment of active CASP3 to the nucleus in apoptotic cells (PubMed:16227597). May act as a carrier protein of GJA1 for its transport to the nucleus (PubMed:26880274). May play a repressive role in the regulation of rDNA transcription. Preferentially binds GC-rich DNA in vitro. In cells, associates with ribosomal RNA (rRNA) chromatin, preferentially with rRNA promoter and transcribed regions (PubMed:26683827). Involved in modulation of Toll-like receptor signaling. Required for the cAMP-dependent suppression of TNF-alpha in early stages of LPS-induced macrophage activation, the function probably implicates targeting of PKA to NFKB1 (By similarity). {ECO:0000250|UniProtKB:Q63014, ECO:0000250|UniProtKB:Q9DBR0, ECO:0000269|PubMed:10601332, ECO:0000269|PubMed:10791967, ECO:0000269|PubMed:11964380, ECO:0000269|PubMed:16980585, ECO:0000269|PubMed:22130794, ECO:0000269|PubMed:26683827, ECO:0000269|PubMed:26880274, ECO:0000305|PubMed:14641107, ECO:0000305|PubMed:9473338}.
Molecular Weight:	76.1 kDa
UniProt:	O43823
Pathways:	SARS-CoV-2 Protein Interactome

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

Handling

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