Datasheet for ABIN3093414

KAT2B Protein (AA 1-832) (Strep Tag)

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Overview

Quantity:	250 µg
Target:	KAT2B
Protein Characteristics:	AA 1-832
Origin:	Human
Source:	Cell-free protein synthesis (CFPS)
Protein Type:	Recombinant
Purification tag / Conjugate:	This KAT2B protein is labelled with Strep Tag.
Application:	Western Blotting (WB), ELISA, SDS-PAGE (SDS)

Product Details

Brand:	AliCE®
Sequence:	MSEAGGAGPG GCGAGAGAGA GPGALPPQPA ALPPAPPQGS PCAAAAGGSG ACGPATAVAA AGTAEGPGGG GSARIAVKKA QLRSAPRAKK LEKLGVYSAC KAEESCKCNG WKNPNPSPTP PRADLQQIIV SLTESCRSCS HALAAHVSHL ENVSEEEMNR LLGIVLDVEY LFTCVHKEED ADTKQVYFYL FKLLRKSILQ RGKPVVEGSL EKKPPFEKPS IEQGVNNFVQ YKFSHLPAKE RQTIVELAKM FLNRINYWHL EAPSQRRLRS PNDDISGYKE NYTRWLCYCN VPQFCDSLPR YETTQVFGRT LLRSVFTVMR RQLLEQARQE KDKLPLEKRT LILTHFPKFL SMLEEEVYSQ NSPIWDQDFL SASSRTSQLG IQTVINPPPV AGTISYNSTS SSLEQPNAGS SSPACKASSG LEANPGEKRK MTDSHVLEEA KKPRVMGDIP MELINEVMST ITDPAAMLGP ETNFLSAHSA RDEAARLEER RGVIEFHVVG NSLNQKPNKK ILMWLVGLQN VFSHQLPRMP KEYITRLVFD PKHKTLALIK DGRVIGGICF RMFPSQGFTE IVFCAVTSNE QVKGYGTHLM NHLKEYHIKH DILNFLTYAD EYAIGYFKKQ GFSKEIKIPK TKYVGYIKDY EGATLMGCEL NPRIPYTEFS VIIKKQKEII

	KKLIERKQAQ IRKVYPGLSC FKDGVRQIPI ESIPGIRETG WKPSGKEKSK EPRDPDQLYS TLKSILQQVK SHQSAWPFME PVKRTEAPGY YEVIRFPMDL KTMSERLKNR YYVSKKLFMA DLQRVFTNCK EYNPPESEYY KCANILEKFF FSKIKEAGLI DK **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 in one-step affinity chromatography • 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 try to ensure that you receive soluble 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! Concentration: • The concentration of our recombinant proteins is measured using the absorbance at 280nm. • The protein's absorbance will be measured against its specific reference buffer. • We use the Expasy's ProtParam tool to determine the absorption coefficient of each protein.
Purification:	One-step Strep-tag purification of proteins expressed in Almost Living Cell-Free Expression

Product Details

	System (AliCE®).
Purity:	> 70-80 % as determined by SDS PAGE, Western Blot and analytical SEC (HPLC).
Grade:	custom-made

Target Details

Target:	KAT2B
Alternative Name:	KAT2B (KAT2B Products)
Background:	Histone acetyltransferase KAT2B (EC 2.3.1.48) (Histone acetyltransferase PCAF) (Histone acetylase PCAF) (Lysine acetyltransferase 2B) (P300/CBP-associated factor) (P/CAF) (Spermidine acetyltransferase KAT2B) (EC 2.3.1.57),FUNCTION: Functions as a histone acetyltransferase (HAT) to promote transcriptional activation (PubMed:8945521). Has significant histone acetyltransferase activity with core histones (H3 and H4), and also with nucleosome core particles (PubMed:8945521). Has a a strong preference for acetylation of H3 at 'Lys-9' (H3K9ac) (PubMed:21131905). Also acetylates non-histone proteins, such as ACLY, MAPRE1/EB1, PLK4, RRP9/U3-55K and TBX5 (PubMed:9707565, PubMed:10675335, PubMed:23001180, PubMed:27796307, PubMed:23932781, PubMed:26867678, PubMed:29174768). Inhibits cell-cycle progression and counteracts the mitogenic activity of the adenoviral oncoprotein E1A (PubMed:8684459). Acts as a circadian transcriptional coactivator which enhances the activity of the circadian transcriptional activators: NPAS2-BMAL1 and CLOCK-BMAL1 heterodimers (PubMed:14645221). Involved in heart and limb development by mediating acetylation of TBX5, acetylation regulating nucleocytoplasmic shuttling of TBX5 (PubMed:29174768). Acts as a negative regulator of centrosome amplification by mediating acetylation of PLK4 (PubMed:27796307). Acetylates RRP9/U3-55K, a core subunit of the U3 snoRNP complex, impairing pre-rRNA processing (PubMed:26867678). Acetylates MAPRE1/EB1, promoting dynamic kinetochore-microtubule interactions in early mitosis (PubMed:23001180). Also acetylates spermidine (PubMed:27389534). {ECO:0000269|PubMed:10675335, ECO:0000269|PubMed:14645221, ECO:0000269|PubMed:21131905, ECO:0000269|PubMed:23001180, ECO:0000269|PubMed:23932781, ECO:0000269|PubMed:26867678, ECO:0000269|PubMed:27389534, ECO:0000269|PubMed:27796307, ECO:0000269|PubMed:29174768, ECO:0000269|PubMed:8684459, ECO:0000269|PubMed:8945521, ECO:0000269|PubMed:9707565}., FUNCTION: (Microbial infection) In case of HIV-1 infection, it is recruited by the viral protein Tat. Regulates Tat's transactivating activity and may help inducing chromatin remodeling of proviral genes.

Target Details

	{ECO:0000269|PubMed:12486002}.
Molecular Weight:	93.0 kDa
UniProt:	Q92831
Pathways:	p53 Signaling, Regulation of Carbohydrate Metabolic Process

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. Standard Storage Buffer: PBS pH 7.4, 10 % Glycerol **Might differ depending on protein.**
Handling Advice:	Avoid repeated freeze-thaw cycles.
Storage:	-80 °C
Storage Comment:	Store at -80°C.
Expiry Date:	12 months