

Datasheet for ABIN7554713 NFATC4 Protein (AA 1-902) (His tag)



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Overview

Quantity:	1 mg
Target:	NFATC4
Protein Characteristics:	AA 1-902
Origin:	Human
Source:	HEK-293 Cells
Protein Type:	Recombinant
Purification tag / Conjugate:	This NFATC4 protein is labelled with His tag.
Application:	SDS-PAGE (SDS), Western Blotting (WB)

Purpose:	Custom-made recombinat NFATC4 Protein expressed in mammalien cells.
Sequence:	MGAASCEDEE LEFKLVFGEE KEAPPLGAGG LGEELDSEDA PPCCRLALGE PPPYGAAPIG
	IPRPPPPRPG MHSPPPRPAP SPGTWESQPA RSVRLGGPGG GAGGAGGGRV LECPSIRITS
	ISPTPEPPAA LEDNPDAWGD GSPRDYPPPE GFGGYREAGG QGGGAFFSPS PGSSSLSSWS
	FFSDASDEAA LYAACDEVES ELNEAASRFG LGSPLPSPRA SPRPWTPEDP WSLYGPSPGG
	RGPEDSWLLL SAPGPTPASP RPASPCGKRR YSSSGTPSSA SPALSRRGSL GEEGSEPPPP
	PPLPLARDPG SPGPFDYVGA PPAESIPQKT RRTSSEQAVA LPRSEEPASC NGKLPLGAEE
	SVAPPGGSRK EVAGMDYLAV PSPLAWSKAR IGGHSPIFRT SALPPLDWPL PSQYEQLELR
	IEVQPRAHHR AHYETEGSRG AVKAAPGGHP VVKLLGYSEK PLTLQMFIGT ADERNLRPHA
	FYQVHRITGK MVATASYEAV VSGTKVLEMT LLPENNMAAN IDCAGILKLR NSDIELRKGE
	TDIGRKNTRV RLVFRVHVPQ GGGKVVSVQA ASVPIECSQR SAQELPQVEA YSPSACSVRG
	GEELVLTGSN FLPDSKVVFI ERGPDGKLQW EEEATVNRLQ SNEVTLTLTV PEYSNKRVSR

PVQVYFYVSN GRRKRSPTQS FRFLPVICKE EPLPDSSLRG FPSASATPFG TDMDFSPPRP
PYPSYPHEDP ACETPYLSEG FGYGMPPLYP QTGPPPSYRP GLRMFPETRG TTGCAQPPAV
SFLPRPFPSD PYGGRGSSFS LGLPFSPPAP FRPPPLPASP PLEGPFPSQS DVHPLPAEGY
NKVGPGYGPG EGAPEQEKSR GGYSSGFRDS VPIQGITLEE VSEIIGRDLS GFPAPPGEEP PA
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:	NFATC4
Alternative Name:	NFATC4 (NFATC4 Products)
Background:	Nuclear factor of activated T-cells, cytoplasmic 4 (NF-ATc4) (NFATc4) (T-cell transcription
	factor NFAT3) (NF-AT3), FUNCTION: Ca(2+)-regulated transcription factor that is involved in
	several processes, including the development and function of the immune, cardiovascular,
	musculoskeletal, and nervous systems (PubMed:7749981, PubMed:11514544,
	PubMed:11997522, PubMed:17875713, PubMed:17213202, PubMed:18668201,
	PubMed:25663301). Involved in T-cell activation, stimulating the transcription of cytokine

genes, including that of IL2 and IL4 (PubMed:7749981, PubMed:18668201, PubMed:18347059). Along with NFATC3, involved in embryonic heart development. Following JAK/STAT signaling activation and as part of a complex with NFATC3 and STAT3, binds to the alpha-beta E4 promoter region of CRYAB and activates transcription in cardiomyocytes (By similarity). Involved in mitochondrial energy metabolism required for cardiac morphogenesis and function (By similarity). Transactivates many genes involved in the cardiovascular system, including AGTR2, NPPB/BNP (in synergy with GATA4), NPPA/ANP/ANF and MYH7/beta-MHC (By similarity). Involved in the regulation of adult hippocampal neurogenesis. Involved in BDNFdriven pro-survival signaling in hippocampal adult-born neurons. Involved in the formation of long-term spatial memory and long-term potentiation (By similarity). In cochlear nucleus neurons, may play a role in deafferentation-induced apoptosis during the developmental critical period, when auditory neurons depend on afferent input for survival (By similarity). Binds to and activates the BACE1/Beta-secretase 1 promoter, hence may regulate the proteolytic processing of the amyloid precursor protein (APP) (PubMed:25663301). Plays a role in adipocyte differentiation (PubMed:11997522). May be involved in myoblast differentiation into myotubes (PubMed:17213202). Binds the consensus DNA sequence 5'-GGAAAAT-3' (Probable). In the presence of CREBBP, activates TNF transcription (PubMed:11514544). Binds to PPARG gene promoter and regulates its activity (PubMed:11997522). Binds to PPARG and REG3G gene promoters (By similarity). {ECO:0000250|UniProtKB:D3Z9H7, ECO:0000250|UniProtKB:Q8K120, ECO:0000269|PubMed:11514544, ECO:0000269|PubMed:11997522, ECO:0000269|PubMed:17213202, ECO:0000269|PubMed:17875713, ECO:0000269|PubMed:18347059, ECO:0000269|PubMed:18668201, ECO:0000269|PubMed:25663301, ECO:0000269|PubMed:7749981, ECO:0000305}.

Molecular Weight:

95.4 kDa

UniProt:

Q14934

Pathways:

RTK Signaling, WNT Signaling

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