

Product datasheet for TP511104

OriGene Technologies, Inc.

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Nfatc4 (NM_023699) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse nuclear factor of activated T cells, cytoplasmic,

calcineurin dependent 4 (Nfatc4), with C-terminal MYC/DDK tag, expressed in HEK293T cells,

20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA Clone >MR211104 representing NM_023699

or AA Sequence: Red=Cloning site Green=Tags(s)

MGAASCEDEELEFKLVFGEEKEPPPLGPGGPGEELDSEDTPPCCRLALGEPLPYGAAPIGIPRPPPPRPG
MHSPPPRPAPSPGTWESQPARSVRLGGPGGNAGGAGGGRVLECPSIRITSISPTPDPPTSLEDTSETWGD
GSPRDYPPPEGFGGYREAGGQGGAFFSPSPGSSSLSSWSFFSDASDEAALYAACDEVESELNEAASRFG
LSSPLPSPRASPRPWTPEDPWSLYGPSSGGRAPEDSWLLLSAPGPVPASPRPASPCGKRRYSSSGTPSSA
SPALSRRGSLGEEGPEPPPPPPPLPLVRDPSSPGPFDYVGAPPTESIPQKTRRTSSEQAVALPRSEEPPSC
NGKLPSGTEDSVAAPGALRKEVAGMDYLAVPSPLAWSKARIGGHSPIFRTSALPPLDWPLPSQYEQLELR
IEVQPRAHHRAHYETEGSRGAVKAAPGGHPVVKLLGYSEKPLTLQMFIGTADERSLRPHAFYQVHRITGK
MVATASYEAVVSGTKVLEMTLLPENNMAANIDCAGILKLRNSDIELRKGETDIGRKNTRVRLVFRVHVPQ
GGGKVVSVQAASVPIECSQRSAQELPQVETYSPSACSVRGGEELVLTGSNFLPDSKVVFIERGPDGKLQW
EEEAAVNRLQSSEVTLTLTIPEYSNKRVSRPVQVYFYVSNGRRKRSPTQSFKFLPVVFKEEPLPDSSLRG
FPSTSGPPFGPDVDFSPPRPPYPSYPHEDPAYETPYLSEGFGYSTPALYPQTGPPPSYRSGLRMFPETGG
TTGCARLPSVSFLPRPFPGDQYGGQGSSFALGLPFSPPAPFRPPLPSSPPLEDPFHPQSAIHPLPPEGYN
EVGPGYTPGEGASEQEKARGGYSSGFRDSVPIQGITLEEVSEIIGRDLSGFPARPGEEPPA

SGPTRTRPLEQKLISEEDLAANDILDYKDDDDK**V**

Tag: C-MYC/DDK
Predicted MW: 95.8 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol





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Note: For testing in cell culture applications, please filter before use. Note that you may experience

some loss of protein during the filtration process.

Storage: Store at -80°C after receiving vials.

Stability: Stable for 12 months from the date of receipt of the product under proper storage and

handling conditions. Avoid repeated freeze-thaw cycles.

RefSeq: NP 076188

 Locus ID:
 73181

 UniProt ID:
 Q8K120

 RefSeq Size:
 3284

 Cytogenetics:
 14 C3

 RefSeq ORF:
 2703

Synonyms: 3110041H08Rik; AW107667; AW546455; Nfat3

Summary: Ca(2+)-regulated transcription factor that is involved in several processes, including the

development and function of the immune, cardiovascular, musculoskeletal, and nervous systems. Involved in T-cell activation, stimulating the transcription of cytokine genes, including that of IL2 and IL4 (PubMed:17198697). Along with NFATC3, involved in embryonic heart development (PubMed:12750314, PubMed:17198697). Involved in mitochondrial energy metabolism required for cardiac morphogenesis and function (PubMed:12750314). Transactivates many genes involved in heart physiology. Along with GATA4, binds to and activates NPPB/BNP promoter (PubMed:9568714). Activates NPPA/ANP/ANF and MYH7/beta-MHC transcription (By similarity). Binds to and transactivates AGTR2 gene promoter (PubMed:17198697). Involved in the regulation of adult hippocampal neurogenesis. Involved

in BDNF-driven pro-survival signaling in hippocampal adult-born neurons. Involved in the formation of long-term spatial memory and long-term potentiation (PubMed:22586092). In cochlear nucleus neurons, may play a role in deafferentation-induced apoptosis during a developmental critical period when auditory neurons depend on afferent input for survival (PubMed:18354019). Binds to and activates the BACE1/Beta-secretase 1 promoter, hence may regulate the proteolytic processing of the amyloid precursor protein (APP). Plays a role in adipocyte differentiation. May be involved in myoblast differentiation into myotubes (By similarity). Binds the consensus DNA sequence 5'-GGAAAAT-3' (Probable). In the presence of CREBBP, activates TNF transcription. Binds to PPARG gene promoter and regulates its activity (By similarity). Binds to PPARG and REG3G gene promoters (PubMed:17198697).

[UniProtKB/Swiss-Prot Function]