

Product datasheet for TP511094

OriGene Technologies, Inc.

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Nfkb2 (NM 001177370) Mouse Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Purified recombinant protein of Mouse nuclear factor of kappa light polypeptide gene

enhancer in B cells 2, p49/p100 (Nfkb2), with C-terminal MYC/DDK tag, expressed in HEK293T

cells, 20ug

Species: Mouse Expression Host: HEK293T

Expression cDNA Clone >MR211094 representing NM_001177370

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

MDNCYDPGLDGIPEYDDFEFSPSIVEPKDPAPETADGPYLVIVEQPKQRGFRFRYGCEGPSHGGLPGASS EKGRKTYPTVKICNYEGPAKIEVDLVTHSDPPRAHAHSLVGKQCSELGVCAVSVGPKDMTAQFNNLGVLH VTKKNMMEIMIQKLQRQRLRSKPQGLTEAERRELEQEAKELKKVMDLSIVRLRFSAFLRASDGSFSLPLK PVISQPIHDSKSPGASNLKISRMDKTAGSVRGGDEVYLLCDKVQKDDIEVRFYEDDENGWQAFGDFSPTD VHKQYAIVFRTPPYHKMKIERPVTVFLQLKRKRGGDVSDSKQFTYYPLVEDKEEVQRKRRKALPTFSQPF GGGSHMGGGSGGSAGGYGGAGGGGSLGFFSSSLAYNPYQSGAAPMGCYPGGGGGAQMAGSRRDTDAG

EGA

EEPRTPPEAPQGEPQALDTLQRAREYNARLFGLAQRSARALLDYGVTADARALLAGQRHLLMAQDENGD

Т

PLHLAIIHGQTGVIEQIAHVIYHAQYLGVINLTNHLHQTPLHLAVITGQTRVVSFLLQVGADPTLLDRHG DSALHLALRAGAAAPELLQALLRSGAHAVPQILHMPDFEGLYPVHLAVHARSPECLDLLVDCGAEVEAPE RQGGRTALHLATEMEELGLVTHLVTKLHANVNARTFAGNTPLHLAAGLGSPTLTRLLLKAGADIHAENEE PLCPLPSPSTSGSDSDSEGPERDTQRNFRGHTPLDLTCSTKVKTLLLNAAQNTTEPPLAPPSPAGPGLSL GDAALQNLEQLLDGPEAQGSWAELAERLGLRSLVDTYRKTPSPSGSLLRSYKLAGGDLVGLLEALSDMGL

HEGVRLLKGPETRDKLPSTEVKEDSAYGSQSVEQEAEKLCPPPEPPGGLCHGHPQPQVH

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-MYC/DDK
Predicted MW: 97.4 kDa

Concentration: >0.05 µg/µL 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





RefSeq Size:

Nfkb2 (NM_001177370) Mouse Recombinant Protein - TP511094

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.

2973

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 001170841

 Locus ID:
 18034

 UniProt ID:
 Q9WTK5

Cytogenetics: 19 38.8 cM

RefSeq ORF: 2697

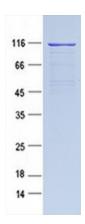
Synonyms: lyt; NF-kappaB2; p49; p49/p100; p50B; p52



Summary:

NF-kappa-B is a pleiotropic transcription factor present in almost all cell types and is the endpoint of a series of signal transduction events that are initiated by a vast array of stimuli related to many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NF-kappa-B is a homo- or heterodimeric complex formed by the Rel-like domain-containing proteins RELA/p65, RELB, NFKB1/p105, NFKB1/p50, REL and NFKB2/p52. The dimers bind at kappa-B sites in the DNA of their target genes and the individual dimers have distinct preferences for different kappa-B sites that they can bind with distinguishable affinity and specificity. Different dimer combinations act as transcriptional activators or repressors, respectively. NF-kappa-B is controlled by various mechanisms of post-translational modification and subcellular compartmentalization as well as by interactions with other cofactors or corepressors. NF-kappa-B complexes are held in the cytoplasm in an inactive state complexed with members of the NF-kappa-B inhibitor (I-kappa-B) family. In a conventional activation pathway, I-kappa-B is phosphorylated by I-kappa-B kinases (IKKs) in response to different activators, subsequently degraded thus liberating the active NF-kappa-B complex which translocates to the nucleus. In a non-canonical activation pathway, the MAP3K14-activated CHUK/IKKA homodimer phosphorylates NFKB2/p100 associated with RelB, inducing its proteolytic processing to NFKB2/p52 and the formation of NF-kappa-B RelB-p52 complexes. The NF-kappa-B heterodimeric RelB-p52 complex is a transcriptional activator. The NF-kappa-B p52-p52 homodimer is a transcriptional repressor. NFKB2 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p100 and generation of p52 by a cotranslational processing. The proteasomemediated process ensures the production of both p52 and p100 and preserves their independent function. p52 binds to the kappa-B consensus sequence 5'-GGRNNYYCC-3', located in the enhancer region of genes involved in immune response and acute phase reactions. p52 and p100 are respectively the minor and major form; the processing of p100 being relatively poor. Isoform p49 is a subunit of the NF-kappa-B protein complex, which stimulates the HIV enhancer in synergy with p65 (By similarity). In concert with RELB, regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-ARNTL/BMAL1 heterodimer.[UniProtKB/Swiss-Prot Function]

Product images:



Purified recombinant protein Nfkb2 was analyzed by SDS-PAGE gel and Coomossie Blue Staining.