

## Product datasheet for **TA328151**

### **NFKB1 Mouse Monoclonal Antibody [Clone ID: 1298CT792.105.117.133]**

#### **Product data:**

|                     |  |
|---------------------|--|
| Product Type:       | Primary Antibodies   |
| Clone Name:         | 1298CT792.105.117.133  |
| Applications:       | WB   |
| Recommend Dilution: | WB: 1:1000   |
| Reactivity:         | Human  |
| Host:               | Mouse  |
| Isotype:            | IgG1, kappa  |
| Clonality:          | Monoclonal   |
| Immunogen:          | This antibody is generated from a mouse immunized with a recombinant protein from human NFKB1. |
| Formulation:        | PBS with 0.09% (W/V) sodium azide  |
| Concentration:      | 0.5mg/ml   |
| Purification:       | This antibody is purified through a protein G column, followed by dialysis against PBS.        |
| Gene Name:          | nuclear factor kappa B subunit 1   |
| Database Link:      | <a href="#">NP_003989 Entrez Gene 4790 Human</a>   |



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**Background:**

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 and the heterodimeric p65-p50 complex appears to be most abundant one. 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. NF-kappa-B heterodimeric p65-p50 and RelB-p50 complexes are transcriptional activators. The NF-kappa-B p50-p50 homodimer is a transcriptional repressor, but can act as a transcriptional activator when associated with BCL3. NFKB1 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p105 and generation of p50 by a cotranslational processing. The proteasome-mediated process ensures the production of both p50 and p105 and preserves their independent function, although processing of NFKB1/p105 also appears to occur post-translationally. p50 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. In a complex with MAP3K8, NFKB1/p105 represses MAP3K8-induced MAPK signaling; active MAP3K8 is released by proteasome-dependent degradation of NFKB1/p105.

**Synonyms:**

CVID12; EBP-1; KBF1; NF-kappa-B; NF-kappaB; NF-kB1; NFkappaB; NFKB-p50; NFKB-p105; p50; p105

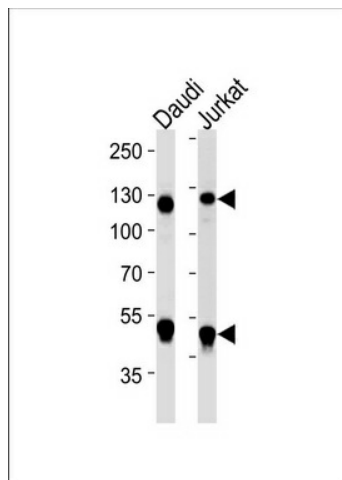
**Protein Families:**

Druggable Genome, Transcription Factors

**Protein Pathways:**

Acute myeloid leukemia, Adipocytokine signaling pathway, Apoptosis, B cell receptor signaling pathway, Chemokine signaling pathway, Chronic myeloid leukemia, Cytosolic DNA-sensing pathway, Epithelial cell signaling in Helicobacter pylori infection, MAPK signaling pathway, Metabolic pathways, Neurotrophin signaling pathway, NOD-like receptor signaling pathway, Pancreatic cancer, Pathways in cancer, Prostate cancer, RIG-I-like receptor signaling pathway, Small cell lung cancer, T cell receptor signaling pathway, Toll-like receptor signaling pathway

## Product images:



Western blot analysis of lysates from Daudi, Jurkat cell line (from left to right), using NFKB1 Antibody (Cat. #TA328151). TA328151 was diluted at 1:1000 at each lane. A goat anti-mouse IgG H&L (HRP) at 1:5000 dilution was used as the secondary antibody. Lysates at 35ug per lane.