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| <b>Product name:</b>     | NFAT2 (Phospho-Ser172) Rabbit Polyclonal Antibody                                            |
| <b>Cat number:</b>       | ABN05820                                                                                     |
| <b>Conjugate:</b>        | Unconjugated                                                                                 |
| <b>Size:</b>             | 100µL                                                                                        |
| <b>Clone:</b>            | Polyclonal                                                                                   |
| <b>Concentration:</b>    | 1mg/ml                                                                                       |
| <b>Host:</b>             | Rabbit                                                                                       |
| <b>Isotype:</b>          | IgG                                                                                          |
| <b>Immunogen:</b>        | Synthesized peptide derived from human NFAT2 (Phospho-Ser172)                                |
| <b>Reactivity:</b>       | Human, Mouse, Rat                                                                            |
| <b>Applications:</b>     | WB 1:500-1:2000                                                                              |
| <b>Molecular Weight:</b> | 104kDa                                                                                       |
| <b>Purification:</b>     | Affinity purification                                                                        |
| <b>Form:</b>             | Liquid                                                                                       |
| <b>Buffer:</b>           | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.           |
| <b>Storage:</b>          | Store at 4°C short term. Aliquot and store at -20°C for 12 months. Avoid freeze/thaw cycles. |

**Background:**

alternative products: Isoform C-alpha and isoform C-beta are the strongest activator of gene transcription, followed by isoform A-alpha and isoform A-beta, whereas isoform B-alpha and isoform B-beta are the weakest. Isoform B-alpha, isoform B-beta, isoform C-alpha and isoform C-beta, both present in T-cells, can modulate their transcriptional activity, domain: Isoforms C have a C-terminal part with an additional trans-activation domain, TAD-B, which acts as a transcriptional activator. Isoforms B have a shorter C-terminal part without complete TAD-B which acts as a transcriptional repressor., domain: Rel Similarity Domain (RSD) allows DNA-binding and cooperative interactions with AP1 factors., domain: The N-terminal transactivation domain (TAD-A) binds to and is activated by Cbp/p300. The dephosphorylated form contains two unmasked nuclear localization signals (NLS), which allow translocation of the protein to the nucleus., function: Plays a role in the inducible expression of cytokine genes in T-cells, especially in the induction of the IL-2 or IL-4 gene transcription. Also controls gene expression in embryonic cardiac cells. Could regulate not only the activation and proliferation but also the differentiation and programmed death of T-lymphocytes as well as lymphoid and non-lymphoid cells., induction: Only isoforms A are inducibly expressed in T lymphocytes upon activation of the T-cell receptor (TCR) complex. Induced after co-addition of phorbol 12-myristate 13-acetate (PMA) and ionomycin. Also induced after co-addition of 12-O-tetradecanoylphorbol-13-acetate (TPA) and ionomycin. Weakly induced with PMA, ionomycin and cyclosporin A., PTM: Phosphorylated by NFATC-kinase; dephosphorylated by calcineurin., similarity: Contains 1 RHD (Rel-like) domain., subcellular location: Cytoplasmic for the phosphorylated form and nuclear after activation that is controlled by calcineurin-mediated dephosphorylation. Rapid nuclear exit of NFATC is thought to be one mechanism by which cells distinguish between sustained and transient calcium signals. The subcellular localization of NFATC plays a key role in the regulation of gene transcription., subunit: Member of the multicomponent NFATC transcription complex that consists of at least two components, a pre-existing cytoplasmic component NFATC2 and an inducible nuclear component NFATC1. Other members such as NFATC4, NFATC3 or members of the activating protein-1 family, MAF, GATA4 and Cbp/p300 can also bind the complex. NFATC proteins bind to DNA as monomers., tissue specificity: Expressed in thymus, peripheral leukocytes as T-cells and spleen. Isoforms A are preferentially expressed in effector T-cells (thymus and peripheral leukocytes) whereas isoforms B and isoforms C are preferentially expressed in naive T-cells (spleen). Isoforms B are expressed in naive T-cells after first antigen exposure and isoforms A are expressed in effector T-cells after second antigen exposure.,