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|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product name:</b>     | Tak1 (phospho Ser439) Rabbit Polyclonal Antibody                                                                                             |
| <b>Cat number:</b>       | ABN05516                                                                                                                                     |
| <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>        | The antiserum was produced against synthesized peptide derived from human MAP3K7 around the phosphorylation site of Ser439. AA range:411-460 |
| <b>Reactivity:</b>       | Human,Mouse,Rat                                                                                                                              |
| <b>Applications:</b>     | WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:10000                                                                       |
| <b>Molecular Weight:</b> | 77kDa                                                                                                                                        |
| <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:**

The protein encoded by this gene is a member of the serine/threonine protein kinase family. This kinase mediates the signaling transduction induced by TGF beta and morphogenetic protein (BMP), and controls a variety of cell functions including transcription regulation and apoptosis. In response to IL-1, this protein forms a kinase complex including TRAF6, MAP3K7P1/TAB1 and MAP3K7P2/TAB2; this complex is required for the activation of nuclear factor kappa B. This kinase can also activate MAPK8/JNK, MAP2K4/MKK4, and thus plays a role in the cell response to environmental stresses. Four alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq, Jul 2008], catalytic activity: ATP + a protein = ADP + a phosphoprotein., cofactor: Magnesium., function: Component of a protein kinase signal transduction cascade. Mediator of TGF-beta signal transduction. Stimulates NF-kappa-B activation and the p38 MAPK pathway., PTM: Association with MAP3K7IP1 promotes autophosphorylation and subsequent activation. Dephosphorylation at Thr-187 by PP2A and PPP6C leads to inactivation., similarity: Belongs to the protein kinase superfamily., similarity: Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase kinase subfamily., similarity: Contains 1 protein kinase domain., subunit: Binds both upstream activators and downstream substrates in multimolecular complexes. Interacts with MAP3K7IP1 and MAP3K7IP2. Interacts with PPM1L. Interaction with PP2A and PPP6C leads to its' repressed activity.,