

Immunotag™ Phospho-SAPK/JNK (Thr183) Antibody

| Antibody Specification |                                                                                                                                                                    |
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| Catalog No.            | ITA1088                                                                                                                                                            |
| Product Description    | Immunotag™ Phospho-SAPK/JNK (Thr183) Antibody                                                                                                                      |
| Size                   | 100 µg, 200 µg                                                                                                                                                     |
| Conjugation            | HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647                                      |
| IMPORTANT NOTE         | This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return. |
| Target Protein         | Phospho-SAPK/JNK (Thr183)                                                                                                                                          |
| Clonality              | Polyclonal                                                                                                                                                         |
| Storage/Stability      | -20°C/1 year                                                                                                                                                       |
| Application            | WB,IHC,IF/ICC,ELISA                                                                                                                                                |
| Recommended Dilution   | WB 1:500-1:2000 IHC 1:50-1:200, IF/ICC 1:100-1:500                                                                                                                 |
| Concentration          | 1 mg/ml                                                                                                                                                            |
| Reactive Species       | Human,Mouse,Rat                                                                                                                                                    |
| Host Species           | Rabbit                                                                                                                                                             |
| Immunogen              | A synthesized peptide derived from human SAPK/JNK around the phosphorylation site of Threonine 183                                                                 |
| Specificity            | Phospho-SAPK/JNK (Thr183) Antibody detects endogenous levels of SAPK/JNK only when phosphorylated at Threonine 183                                                 |
| Purification           | The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns.            |
| Form                   | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt        |
| Gene Name              | MAPK8                                                                                                                                                              |
| Accession No.          | P45983/P45984/P53779                                                                                                                                               |

## Antibody Specification

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| Alternate Names           | <p>C Jun kinase 2; c Jun N terminal kinase 1; c Jun N terminal kinase 2; c Jun N terminal kinase 3; c-Jun N-terminal kinase 1; JNK 46; JNK 55; JNK; JNK-46; JNK1; JNK1A2; JNK2; JNK21B1/2; JNK2A; JNK2ALPHA; JNK2B; JNK2BETA; JNK3 alpha protein kinase; JNK3; JNK3A; Jun kinase; JUN N terminal kinase; MAP kinase 10; MAP kinase 8; MAP kinase 9; MAP kinase p49 3F12; MAPK 10; MAPK 8; MAPK 9; MAPK10; mapk8; MAPK9; Mitogen activated protein kinase 10; Mitogen activated protein kinase 8; Mitogen activated protein kinase 8 isoform JNK1 alpha1; Mitogen activated protein kinase 8 isoform JNK1 beta2; Mitogen activated protein kinase 9; Mitogen-activated protein kinase 8; MK08_HUMAN; p493F12; p54a; p54aSAPK; p54bSAPK; PRKM10; PRKM8; PRKM9; SAPK; SAPK(beta); SAPK1; SAPK1a; SAPK1b; SAPK1c; Stress activated protein kinase 1; Stress activated protein kinase 1a; Stress activated protein kinase 1b; Stress activated protein kinase 1c; Stress activated protein kinase beta; Stress activated protein kinase JNK1; Stress activated protein kinase JNK2; Stress activated protein kinase JNK3; Stress-activated protein kinase 1c; Stress-activated protein kinase JNK1; c Jun kinase 2; C Jun N terminal kinase 2; c-Jun N-terminal kinase 2; JNK 55; JNK-55; JNK2 alpha; JNK2; JNK2 beta; JNK2A; JNK2alpha; JNK2B; JNK2BETA; Jun kinase; MAP kinase 9; MAPK 9; Mapk9; Mitogen activated protein kinase 9; Mitogen-activated protein kinase 9; MK09_HUMAN; P54a; p54aSAPK; PRKM9; Protein kinase, mitogen-activated, 9; SAPK alpha; SAPK; SAPK1a; Stress activated protein kinase 1a; Stress-activated protein kinase JNK2; c Jun kinase 3; c-Jun N-terminal kinase 3; cJun N terminal kinase 3; FLJ12099; FLJ33785; JNK3 alpha protein kinase; JNK3; JNK3A; MAP kinase 10; MAP kinase; MAP kinase p49 3F12; MAPK 10; Mapk10; MGC50974; mitogen activated protein kinase 10; Mitogen-activated protein kinase 10; MK10_HUMAN; p493F12; p54bSAPK; PRKM10; protein kinase mitogen activated 10; SAPK1b; Stress activated protein kinase 1b; stress activated protein kinase beta; Stress activated protein kinase JNK3; Stress-activated protein kinase JNK3;</p> |
| Description               | <p>Serine/threonine-protein kinase involved in various processes such as cell proliferation, differentiation, migration, transformation and programmed cell death. Extracellular stimuli such as proinflammatory cytokines or physical stress stimulate the stress-activated protein kinase/c-Jun N-terminal kinase (SAP/JNK) signaling pathway. In this cascade, two dual specificity kinases MAP2K4/MKK4 and MAP2K7/MKK7 phosphorylate and activate MAPK8/JNK1. In turn, MAPK8/JNK1 phosphorylates a number of transcription factors, primarily components of AP-1 such as JUN, JDP2 and ATF2 and thus regulates AP-1 transcriptional activity. Phosphorylates the replication licensing factor CDT1, inhibiting the interaction between CDT1 and the histone H4 acetylase HBO1 to replication origins. Loss of this interaction abrogates the acetylation required for replication initiation. Promotes stressed cell apoptosis by phosphorylating key regulatory factors including p53/TP53 and Yes-associates protein YAP1. In T-cells, MAPK8 and MAPK9 are required for polarized differentiation of T-helper cells into Th1 cells. Contributes to the survival of erythroid cells by phosphorylating the antagonist of cell death BAD upon EPO stimulation. Mediates starvation-induced BCL2 phosphorylation, BCL2 dissociation from BECN1, and thus activation of autophagy. Phosphorylates STMN2 and hence regulates microtubule dynamics, controlling neurite elongation in cortical neurons. In the developing brain, through its cytoplasmic activity on STMN2, negatively regulates the rate of exit from multipolar stage and of radial migration from the ventricular zone. Phosphorylates several other substrates including heat shock factor protein 4 (HSF4), the deacetylase SIRT1, ELK1, or the E3 ligase ITCH. Phosphorylates the CLOCK-ARNTL/BMAL1 heterodimer and plays a role in the regulation of the circadian clock (PubMed:22441692). Phosphorylates the heat shock transcription factor HSF1, suppressing HSF1-induced transcriptional activity (PubMed:10747973).</p>                                                                                   |
| Cell Pathway/<br>Category | Primary Polyclonal Antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

## Antibody Specification

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| Protein MW | 46,54kDa                                                             |
| Usage      | For Research Use Only! Not for diagnostic or therapeutic procedures. |