

# Immunotag™ Phospho-MEK1 (Thr286) Antibody

| Antibody Specification |  |
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| Catalog No.            | ITA0692  |
| Product Description    | Immunotag™ Phospho-MEK1 (Thr286) 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-MEK1 (Thr286)  |
| Clonality              | Polyclonal   |
| Storage/Stability      | -20°C/1 year   |
| Application            | WB,IHC   |
| Recommended Dilution   | WB 1:500-1:2000, IHC 1:50-1:200  |
| Concentration          | 1 mg/ml  |
| Reactive Species       | Human,Mouse,Rat  |
| Host Species           | Rabbit   |
| Immunogen              | A synthesized peptide derived from human MEK1 around the phosphorylation site of Thr286.   |
| Specificity            | Phospho-MEK1 (Thr286) Antibody detects endogenous levels of MEK1.  |
| 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              | MAP2K1   |
| Accession No.          | Q02750   |

## Antibody Specification

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| Alternate Names           | Dual specificity mitogen activated protein kinase kinase 1; Dual specificity mitogen-activated protein kinase kinase 1; ERK activator kinase 1; MAP kinase kinase 1; MAP kinase/Erk kinase 1; MAP2K1; MAPK/ERK kinase 1; MAPKK 1; MAPKK1; MEK 1; Mek1; MEKK1; Mitogen activated protein kinase kinase 1; MKK 1; MKK1; MP2K1_HUMAN; PRKMK1; Protein kinase mitogen activated kinase 1 (MAP kinase kinase 1); Protein kinase mitogen activated, kinase 1;   |
| Description               | Dual specificity protein kinase which acts as an essential component of the MAP kinase signal transduction pathway. Binding of extracellular ligands such as growth factors, cytokines and hormones to their cell-surface receptors activates RAS and this initiates RAF1 activation. RAF1 then further activates the dual-specificity protein kinases MAP2K1/MEK1 and MAP2K2/MEK2. Both MAP2K1/MEK1 and MAP2K2/MEK2 function specifically in the MAPK/ERK cascade, and catalyze the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in the extracellular signal-regulated kinases MAPK3/ERK1 and MAPK1/ERK2, leading to their activation and further transduction of the signal within the MAPK/ERK cascade. Depending on the cellular context, this pathway mediates diverse biological functions such as cell growth, adhesion, survival and differentiation, predominantly through the regulation of transcription, metabolism and cytoskeletal rearrangements. One target of the MAPK/ERK cascade is peroxisome proliferator-activated receptor gamma (PPARG), a nuclear receptor that promotes differentiation and apoptosis. MAP2K1/MEK1 has been shown to export PPARG from the nucleus. The MAPK/ERK cascade is also involved in the regulation of endosomal dynamics, including lysosome processing and endosome cycling through the perinuclear recycling compartment (PNRC), as well as in the fragmentation of the Golgi apparatus during mitosis. |
| Cell Pathway/<br>Category | Primary Polyclonal Antibody   |
| Protein MW                | 45kDa   |
| Usage                     | For Research Use Only! Not for diagnostic or therapeutic procedures.  |