

## Product datasheet for **AP20823PU-M**

### MEK1 (MAP2K1) pSer222 (+MAP2K2 pSer226) Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	<b>Western blot:</b> 1/500 - 1/1000. <b>Immunohistochemistry on paraffin sections</b> 1/50 - 1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Specificity:	This antibody detects endogenous levels of MEK-1/2 protein only when phosphorylated at Ser222/226.
Formulation:	Phosphate buffered saline (PBS), pH 7.2. State: Aff - Purified State: Liquid purified Ig fraction Preservative: 0.05% sodium azide
Concentration:	1.0 mg/ml
Purification:	Affinity chromatography (> 95% (by SDS-PAGE)
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	~ 43 kDa
Gene Name:	mitogen-activated protein kinase kinase 1
Database Link:	<u><a href="#">Entrez Gene 26395 Mouse</a></u> <u><a href="#">Entrez Gene 170851 Rat</a></u> <u><a href="#">Entrez Gene 5604 Human</a></u> <u><a href="#">Q02750</a></u>



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**Background:**

A family of protein kinases located upstream of the MAP kinases and responsible for their activation has been identified. The prototype member of this family, designated MAP kinase kinase, or MEK-1, specifically phosphorylates the MAP kinase regulatory threonine and tyrosine residues present in the Thr-Glu-Tyr motif of ERK). A second MEK family member, MEK-2, resembles MEK-1 in its substrate specificity. MEK-3 (or MKK-3) functions to activate p38 MAP kinase, and MEK-4 (also called SEK1 or MKK-4) activates both p38 and JNK MAP kinases. MEK-5 appears to specifically phosphorylate ERK5, whereas MEK-6 phosphorylates p38 and p38beta. MEK-7 (or MKK-7) phosphorylates and activates the JNK signal transduction pathway. Phosphorylation on Ser/Thr by MAP kinase kinase kinases (RAF or MEKK1) positively regulates the kinase activity.

**Synonyms:**

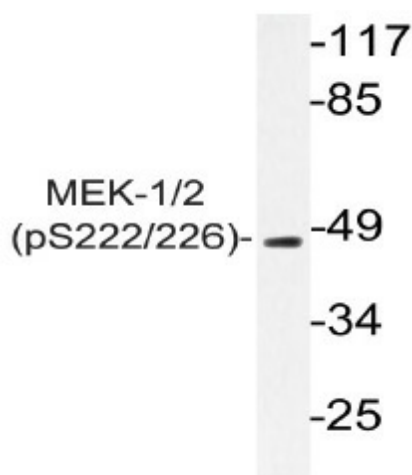
MAPKK 1, ERK activator kinase 1, MAPK/ERK kinase 1, MEK1, PRKMK1, MAP kinase kinase 1

**Protein Families:**

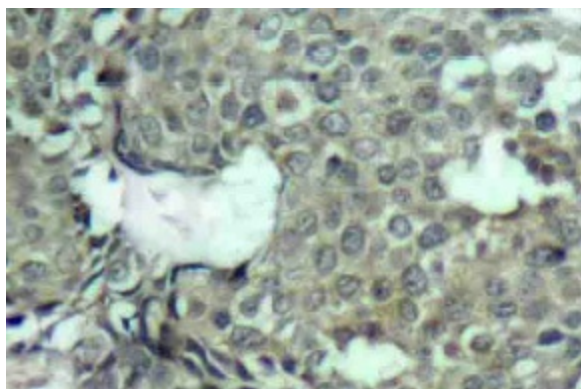
Druggable Genome, Protein Kinase

**Protein Pathways:**

Acute myeloid leukemia, B cell receptor signaling pathway, Bladder cancer, Chemokine signaling pathway, Chronic myeloid leukemia, Colorectal cancer, Dorso-ventral axis formation, Endometrial cancer, ErbB signaling pathway, Fc epsilon RI signaling pathway, Fc gamma R-mediated phagocytosis, Focal adhesion, Gap junction, Glioma, GnRH signaling pathway, Insulin signaling pathway, Long-term depression, Long-term potentiation, MAPK signaling pathway, Melanogenesis, Melanoma, Natural killer cell mediated cytotoxicity, Neurotrophin signaling pathway, Non-small cell lung cancer, Oocyte meiosis, Pancreatic cancer, Pathways in cancer, Prion diseases, Progesterone-mediated oocyte maturation, Prostate cancer, Regulation of actin cytoskeleton, Renal cell carcinoma, T cell receptor signaling pathway, Thyroid cancer, Toll-like receptor signaling pathway, Vascular smooth muscle contraction, VEGF signaling pathway

**Product images:**


Western blot (WB) analyzes of p-MEK-1/2 antibody (Cat.-No.: [AP20823PU-N]) in extracts from Jurkat EGF cells.



Immunohistochemistry (IHC) analyzes of p-MEK-1/2 antibody (Cat.-No.: [AP20823PU-N]) in paraffin-embedded human breast carcinoma tissue.