

## Product datasheet for **AP02443PU-N**

### MEK1 (MAP2K1) pSer222 Rabbit Polyclonal Antibody

#### Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	Western Blot: 1/500-1/1000. Immunofluorescence: 1/100-1/200. Immunohistochemistry on Paraffin-Embedded Sections: 1/50-1/100.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The antiserum was produced against synthesized phosphopeptide derived from human MEK1 around the phosphorylation site of serine 221 (A-N-S <sub>p</sub> -F-V).
Specificity:	MEK1 (phospho-Ser221) antibody detects endogenous levels of MEK1 only when phosphorylated at serine 221.
Formulation:	PBS (without Mg <sup>2+</sup> and Ca <sup>2+</sup> ), pH 7.4, 150 mM NaCl, 0.02% sodium azide and 50% glycerol State: Aff - Purified State: Liquid purified IgG fraction
Concentration:	lot specific
Purification:	Affinity-chromatography using epitope-specific phosphopeptide. The antibody against non-phosphopeptide was removed by chromatography using non-phosphopeptide corresponding to the phosphorylation site.
Conjugation:	Unconjugated
Storage:	Store the antibody (in aliquots) at -20°C. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Gene Name:	mitogen-activated protein kinase kinase 1
Database Link:	<a href="#">Entrez Gene 5604 Human Q02750</a>



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**Background:**

MEK1 (Mitogen activated protein kinase kinase 1) catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. MEK1 activates ERK1 and ERK2 MAP kinases. MEK1 is activated by dual phosphorylation, which occurs on serine 218 and 222, in the activation loop of the MEK. Threonine 292 of MEK1 is phosphorylated by ERK 2, which serves as a negative feedback loop by suppressing activation of MEK1.

**Synonyms:**

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

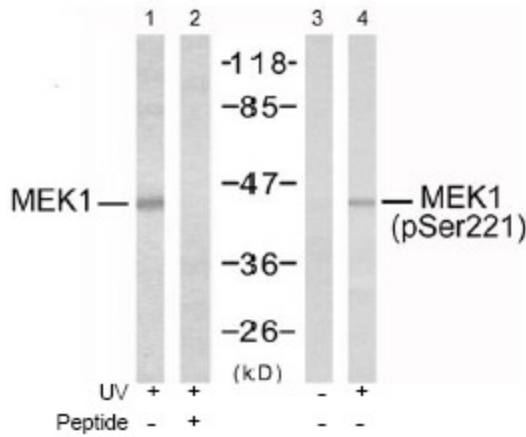
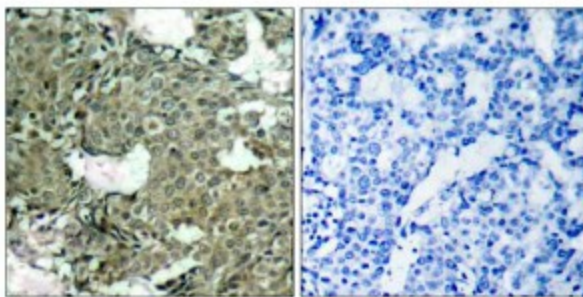
**Product images:**


Figure 2. Western blot analysis of extracts from Jurkat cells, using MEK1 antibody (Lane 1 and 2) and MEK1 (phospho-Ser221) antibody (#, Lane 3 and 4).



P-Peptide

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Figure 1. Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue using MEK1 (phospho-Ser221) antibody

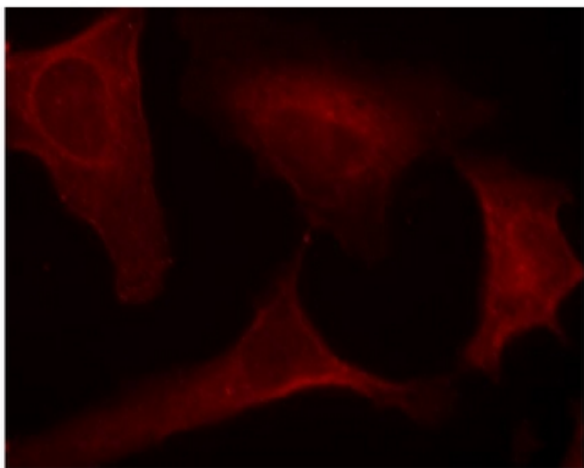


Figure 3. Immunofluorescence staining of methanol-fixed HeLa cells using MEK1 (phospho-Ser221) antibody (Red).