

**AP23276PU-N****Polyclonal Antibody to ERK1 / ERK2 (N-term) - Aff - Purified****Alternate names:**

ERK-1/ERK-2, Extracellular signal-regulated kinase, Insulin-stimulated MAP2 kinase, MAPK1/MAPK2, Mitogen-activated protein kinase, P42/P44-MAPK

**Quantity:**

0.1 mg

**Background:**

MAPK1(ERK2) shares high homology with MAPK3(ERK1). MAP kinase phosphatase as a locus of flexibility in a mitogen-activated protein kinase signaling network. Mitogen-activated protein (MAP) kinases [also known as Erks] have been established to function as important mediators of signal transduction by growth factor receptors. ERK1/ERK2-dependent activation of endogenous ribosomal transcription, while inactivation of ERK1/ERK2 causes an equally immediate reversion to the basal transcription level. ERK1/ERK2 was found to phosphorylate the architectural transcription factor UBF at amino acids 117 and 201 within HMG boxes 1 and 2, preventing their interaction with DNA. Mutation of these sites inhibited transcription activation and abrogated the transcriptional response to ERK1/ERK2.

**Host / Isotype:**

Rabbit / IgG

**Immunogen:**

Synthetic peptide mapping at the N-terminal of the human MAPK1+3

**Remarks:** Sequence is identical to the related rat sequence.

**Format:**

**State:** Lyophilized Ig fraction

**Purification:** Immunogen affinity purified

**Buffer System:** 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Thimerosal, 0.05mg NaN<sub>3</sub>

**Reconstitution:** 0.2ml of distilled water will yield a concentration of 500µg/ml.

**Applications:**

Western blot: At 0.5-1µg/ml with the appropriate system to detect MAPK1/3 in cells and tissues.

Immunohistochemistry on paraffin sections: At 1-2µg/ml to detect MAPK1/3 in formalin fixed and paraffin embedded tissues. Boiling the sections is required.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:**

This antibody detects ERK1 / ERK2 at N-term. No cross reactivity with other proteins.

**Species Reactivity:**

**Tested:** Human, mouse, rat

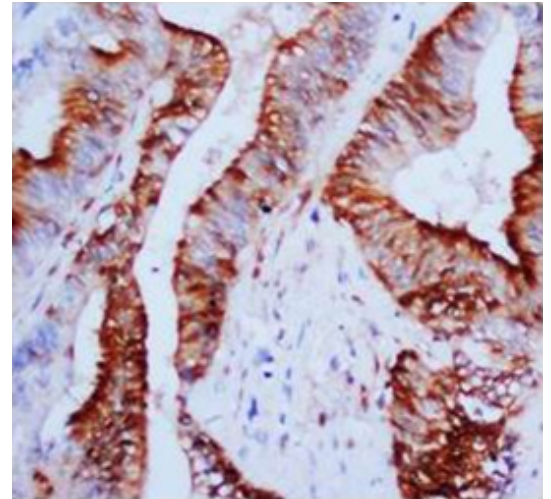
**Storage:**

Store at 2 - 8 °C for up to one month or (in aliquots) at -20 °C for longer. Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

**Pictures:**

Immunohistochemical analysis of paraffin embedded Mammary cancer sections, staining MAPK1-3 in cytoplasm and nucleus, DAB chromogenic reaction



Western blot analysis of Hela cell lysis using MAPK1-3 antibody

