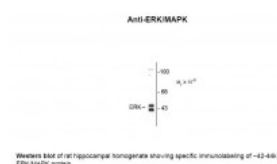




## MAPK Antibody

CATALOG NUMBER: 50-207



Western blot of rat hippocampal homogenate showing specific immunolabeling of ~42-44k ERK/MAPK protein.

### Specifications

<b>SPECIES REACTIVITY:</b>	Mouse, Rat
<b>TESTED APPLICATIONS:</b>	WB
<b>APPLICATIONS:</b>	The antibody has been directly tested for reactivity in Western blots with rat tissue. It is anticipated that the antibody will also react with mouse tissue based on the fact that this species has 100% homology with the amino acid sequence used as antigen.
<b>USER NOTE:</b>	Optimal dilutions for each application to be determined by the researcher.
<b>PREDICTED MOLECULAR WEIGHT:</b>	42/44
<b>IMMUNOGEN:</b>	Peptide corresponding to amino acid residues from the C-terminus of rat ERK/MAPK.
<b>HOST SPECIES:</b>	Rabbit

### Properties

<b>PURIFICATION:</b>	Affinity Purified
<b>PHYSICAL STATE:</b>	Liquid
<b>BUFFER:</b>	100 uL in 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 ug per mL BSA and 50% glycerol.
<b>STORAGE CONDITIONS:</b>	MAPK antibody can be stored at -20°C and is stable at -20°C for at least 1 year.
<b>CLONALITY:</b>	Polyclonal
<b>CONJUGATE:</b>	Unconjugated

### Additional Info

<b>ALTERNATE NAMES:</b>	Erk2, Erk2, Mapk, Prkm1, ERT1, MAP kinase 1
<b>ACCESSION NO.:</b>	P63086
<b>PROTEIN GI NO.:</b>	52001075
<b>OFFICIAL SYMBOL:</b>	Mapk1
<b>GENE ID:</b>	116590

## Background

**BACKGROUND:** Extracellular-Signal Regulated Kinase/Mitogen-Activated Protein Kinase (ERK/MAPK) is an integral component of cellular signaling during mitogenesis and differentiation of mitotic cells and also is thought to play a key role in learning and memory (Adams and Sweatt, 2002; Ahn, 1993; Tanoue and Nishida, 2003; Johnson and Lapadat, 2002). The activity of this kinase is regulated by dual phosphorylation at Thr202 and Tyr204 (Ahn, 1993).

- REFERENCES:**
- 1) Adams JP, Sweatt JD (2002) Molecular psychology: Roles for the ERK MAP kinase cascade in memory. *Annu Rev Pharmacol Toxicol* 42:135-163.
  - 2) Ahn, NG (1993) The MAP kinase cascade. Discovery of a new signal transduction pathway. *Mol Cell Biochem* 127-128:201-209.
  - 3) Johnson GL, Lapadat R (2002) Mitogen-activated protein kinase pathways mediated by ERK, JNK, and p38 protein kinases. *Science* 298:1911-1912.

**FOR RESEARCH USE ONLY**

December 13, 2016