

Anti-Phospho-Thr202/Tyr204 ERK/MAPK Antibody

Product Data Sheet · P/N 74121 Rev 01 · Reissued 2026-09-19 (layout only)

Product code	Pack size
P46101-100	100 µL
Host Species	Rabbit (Polyclonal)
Mr (kDa)	42-44

Description

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).

Immunogen

Phosphopeptide corresponding to amino acid residues surrounding the phospho-Thr202 and Tyr204 of rat ERK/MAPK. Specific for the ~42k - 44k ERK/MAPK phosphorylated at Thr202 and Tyr204.

Immunolabeling is blocked by the phosphopeptide used as antigen but not by the corresponding dephosphopeptide. The immunolabeling is completely eliminated by λ-phosphatase.

Species Reactivity

The antibody has been directly tested for reactivity in Western blots with human and rat tissue. It is anticipated that the antibody will also react with bovine, canine, chicken, mouse, non-human primates, Xenopus and zebra fish based on the fact that these species have 100% homology with the amino acid sequence used as antigen.

WB: 1:1000

IHC: 1:500

Physical State

Liquid; Buffer contents: 10 mM HEPES (pH 7.5), 150 mM NaCl, 100 µg per mL BSA and 50% glycerol

Purification Method

Prepared from rabbit serum by affinity purification via sequential chromatography on phospho- and dephosphopeptide affinity columns.

Storage/Stability

Stable at -20 °C for at least 1 year.

For long term storage -20 °C is recommended

Shipping Conditions

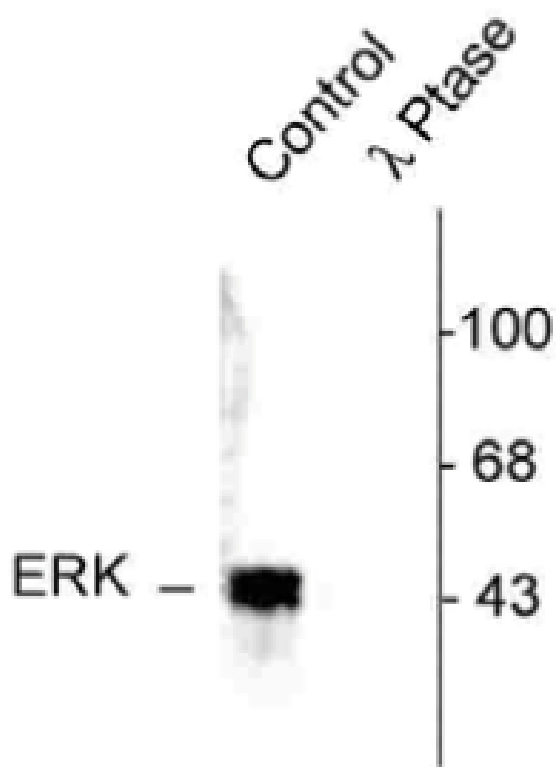
Domestic: Blue Ice

International: Blue Ice or Dry Ice

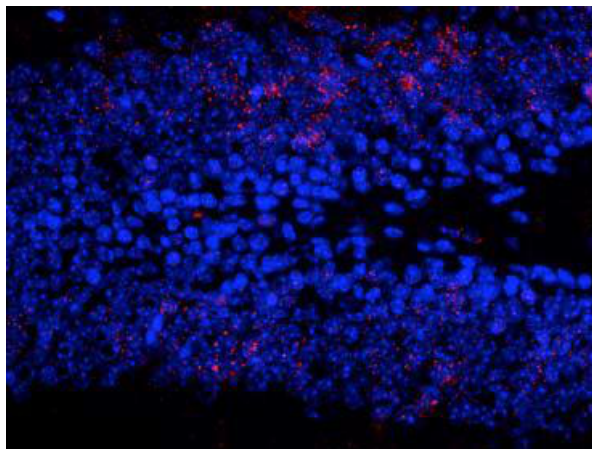
References

- 1) Adams JP et al. (2002) Annu Rev Pharmacol Toxicol 42:135-163.
- 2) Ahn, NG (1993) Mol Cell Biochem 127-128:201-209.
- 3) Johnson GL et al. (2002) Science 298:1911-1912.
- 4) Tanoue TJ et al. (2003) Cellular Signaling 15:455-

462.



Immunostaining Granule cells in the dentate gyrus of saline treated mouse showing ERK/MAPK when phosphorylated at Thr202 and Tyr204 (red) and nuclei (blue). Photo courtesy of Robert Wine.



Western Blot Human T47D cell lysates showing specific immunolabeling of ~42- 44k ERK/MAPK protein phosphorylated at Thr202/ Tyr204 (Control). Immunolabeling is completely eliminated by treatment with λ- Phosphatase in lane 2.

For research use or further manufacturing only. Not for use in diagnostic procedures, or for human or animal consumption.