

DATASHEET

Version: 2016-08-17

ERK1/2 Antibody (Phospho-Thr²⁰²/Tyr²⁰⁴), pAb, Rabbit**Cat. No.:** A01386-100**Size:** 100 µg**Synonyms:** Rabbit Anti-ERK1/2 (Phospho-Thr²⁰²/Tyr²⁰⁴) pAb;**Description:**

ERK (extracellular signal regulated kinase), also known as MAPK (mitogen activated protein kinase) includes two closely related isoforms ERK1 and ERK2 (p44 and p42 MAP Kinase). ERK1/2 signaling pathway can be activated in response to a diverse range of extracellular stimuli including mitogens, growth factors, and cytokines. The downstream effects of ERK1/2 signaling pathway are linked to the regulation of cell growth and differentiation as well as the cytoskeleton. Downstream targets of ERK1/2 contain p90RSK and the transcription factor Elk-1. ERK1 and ERK2 are phosphorylated within the activation loop on both a threonine and a tyrosine residue (within a Thr-Glu-Tyr motif) by MEKs (MAPK/ERK kinases), thereby greatly elevating the activity of ERK1/2. ERK1/2 are negatively regulated by a family of dual-specificity (Thr/Tyr) MAPK phosphatases.

GenScript **Rabbit Anti-ERK1/2 (Phospho-Thr²⁰²/Tyr²⁰⁴) Polyclonal Antibody** is developed in rabbit using a KLH-coupled synthetic dual phosphopeptide corresponding to residues surrounding Thr202/Tyr204 of human ERK1 (Swiss Prot: P27361) and ERK2 (Swiss Prot: P28482).

Immunogen: KLH-coupled synthetic dual phospho-peptide corresponding to residues surrounding Thr202/Tyr204 of human ERK1 (Swiss Prot: P27361) and ERK2 (Swiss Prot: P28482)

Host: Rabbit**Antigen Synonyms:** Human**Conjugation:** Unconjugated**Formulation:**

0.5 mg/ml, lyophilized with PBS, pH 7.4, containing 0.02% sodium azide

Ig Subclass: Rabbit IgG

Specificity: GenScript Rabbit Anti-ERK1/2 (Phospho-Thr²⁰²/Tyr²⁰⁴) Polyclonal Antibody detects endogenous levels of human and rat ERK1 and ERK2 when dually phosphorylated at Thr202 and Tyr204 of ERK1 (Thr185 and Tyr187 of ERK2), and singly phosphorylated at Tyr204. The antibody does not cross-react with the corresponding phosphorylated residues of either JNK/SAPK or p38 MAP kinase. Predicted to react with mouse ERK1 and ERK2 protein according to sequence homology.

Purification: Affinity chromatography using dual phosphopeptide, cross -adsorbed with corresponding single phosphopeptide and non-phosphopeptide

Applications:

Working concentrations for specific applications should be determined by the investigator. The appropriate concentrations may be affected by secondary antibody affinity, antigen concentration, the sensitivity of the method of detection, temperature, the length of the incubations, and other factors. The suitability of this antibody for applications other than those listed below has not been determined. The following concentration ranges are recommended starting points for this product.

ELISA: 0.05-0.2 µg/ml**Western blot:** 1-2 µg/ml**Other Applications:** user-optimized

Species Reactivity: Human and rat. This product has not been tested with other species yet.

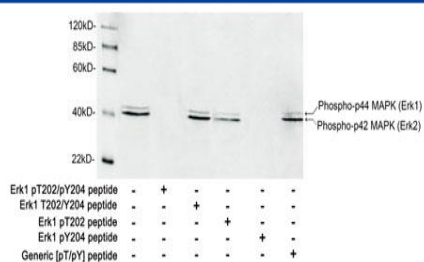
Reconstitution:

Reconstitute the lyophilized powder with deionized water (or equivalent) to an antibody concentration of 0.5 mg/ml.

Storage:

The antibody is stable in lyophilized form if stored at -20°C or below. The reconstituted antibody can be stored for 2-3 weeks at 2-8°C. For long term storage, aliquot and store at -20°C or below. Avoid repeated freezing and thawing cycles.

Example**860 Centennial Ave., Piscataway, NJ 08854, USA**Toll-Free: 1-877-436-7274 Tel: 1-732-885-9188 Fax: 1-732-210-0262 Email: product@genscript.com Web: www.genscript.com



Western blot analysis of HeLa lysate using 1 µg/ml GenScript Rabbit Anti-ERK1/2 (Phospho-Thr²⁰²/Tyr²⁰⁴) Polyclonal Antibody (GenScript, A01386)

The signal was developed with IRDyeTM 800 Conjugated Goat Anti-Rabbit IgG.