

DATASHEET

Version: 2016-08-17

ERK2 Antibody, pAb, Rabbit**Cat. No.:** A01194-40**Size:** 40 µg**Synonyms:** Rabbit Anti-ERK2 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-ERK2 Polyclonal Antibody** is developed in rabbit using a KLH-coupled synthetic peptide (KRIEVEQALAHPLYEQYYDPSDE) corresponding to 300-322 residues of human ERK2 (Swiss Prot: P28482).

Immunogen: KLH-coupled synthetic peptide (KRIEVEQALAHPLYEQYYDPSDE) corresponding to 300-322 residues of human 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-ERK2 Polyclonal Antibody detects endogenous levels of human, mouse and rat ERK2 (p42 MAP Kinase) and slightly cross-reacts with ERK1 (p44 MAP Kinase).

Purification: Immunoaffinity chromatography**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:** 0.5-2 µg/ml**Immunoprecipitation (IP):** 2-10 µg/mg of lysate**Flow cytometry:** 1-3 µg for 1 x 10⁶ cells**Other Applications:** user-optimized

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

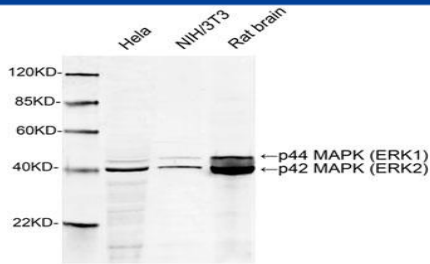
Reconstitution:

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

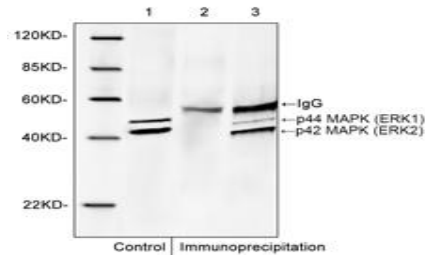
Storage:

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.

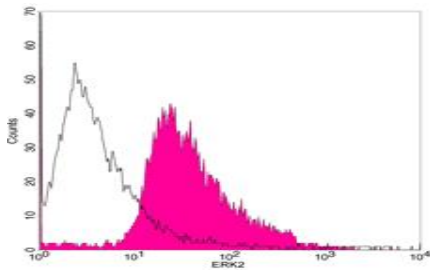
Example



Western blot analysis of cell lysates and tissue lysate using 1 µg/ml Rabbit Anti-ERK2 Polyclonal Antibody (GenScript, A01194). The signal was developed with IRDye™ 800 Conjugated Goat Anti-Rabbit IgG.



Western blot analysis of immunoprecipitates from rat brain lysate using Rabbit Anti-ERK2 Polyclonal Antibody (GenScript, A01194). Lane 1: Input control material for rat brain lysate. Lane 2: Negative control – IP with isotype control antibody (GenScript, A01008). Lane 3: Immunoprecipitation with Rabbit Anti-ERK2 Polyclonal Antibody (GenScript, A01194).



Flow cytometric analysis of HeLa cells using Rabbit Anti-ERK2 Polyclonal Antibody (GenScript, A01194; shaded histogram) or with an isotype control antibody (GenScript, A01008; open histogram), followed by R-PE conjugated anti-rabbit IgG .