# AB-PK950

## ERK1-pT207 Antibody

Phosphosite-specific rabbit polyclonal antibody for ERK1 (MAPK3). This phosphothreonine-site antibody is specific for phosphothreonine in the phosphosite.

Website: www.kinexus.ca
Email: info@kinexus.ca
Phone: 604-323-2547

Address: 8755 Ash Street, Suite 1
Vancouver, British Columbia,
Canada V6P 6T3

## Target Protein

| | |
|---|---|
| **Protein Name Long:** | Extracellular regulated protein-serine kinase 1 (p44 MAP kinase) |
| **Protein Alias:** | ERK-1; ERT2; Insulin-stimulated MAP2 kinase; Kinase ERK1; MAP kinase 1; MAPK 1; MAPK1; MAPK3; PRKM3; p44ERK1; p44MAPK; MGC20180; ENSG00000102882 |
| **UniProt ID:** | P27361 |
| **Protein Molecular Mass:** | 43,136 Da (379 AA; P27361); 40,088 Da (357 AA; P27361-3); 38,275 Da (335 AA; P27361-2) |

## Immunogen

| | |
|---|---|
| **Antibody Immunogen Source:** | Synthetic phosphopeptide patterned after human ERK1 |
| **Antibody Immunogen Sequence:** | C(βA)YVA(pT)RWY |
| **Antibody Immunogen Description:** | Corresponds to amino acid residues Y204 to Y210. T207 phosphorylation inhibits phosphotransferase activity. This phosphosite is located in the kinase activation loop between catalytic subdomains VII and VIII. This is a minor *in vivo* phosphorylation sites in ERK1 (≥43 reports from high throughput mass spectrometry studies recorded in PhosphoSitePlus). ERK1 is known to be phosphorylated at this site *in vitro* by ERK1. |
| **Antibody Target Type:** | Phosphosite-specific |

## Production

| | |
|---|---|
| **Antibody Host Species:** | Rabbit |
| **Antibody Type:** | Polyclonal |
| **Antibody Isotype:** | IgG |
| **Production Method:** | The immunizing peptide was produced by solid phase synthesis on a multipep peptide synthesizer and purified by reverse-phase hplc chromatography. Purity was assessed by analytical hplc and the amino acid sequence confirmed by mass spectrometry analysis. This peptide was coupled to KLH prior to immunization into rabbits. New Zealand White rabbits were subcutaneously injected with KLH-coupled immunizing peptide every 4 weeks for 4 months. The sera from these animals was applied onto an agarose column to which the immunogen peptide was thio-linked. Antibody was eluted from the column with 0.1 M glycine, pH 2.5. Subsequently, the antibody solution was neutralized to pH 7.0 with saturated Tris. |
| **Amount:** | 25 µg |
| **Antibody Concentration:** | 0.55 mg/ml |
| **Storage Buffer:** | Phosphate buffered saline pH 7.4, 0.05% Thimerasol |
| **Storage Conditions:** | For long term storage, keep frozen at -40°C or lower. Stock solution can be kept at +4°C for more than 3 months. Avoid repeated freeze-thaw cycles. |
| **Storage Stability:** | >2 years |

## Applications

| | |
|---|---|
| **Product Use:** | Western blotting \| Antibody microarray |
| **Antibody Dilution Recommended:** | 2 µg/ml for immunoblotting |
| **Antibody Species Reactivity:** | Human \| Chimpanzee \| Rhesus Macaque \| Dog \| Rat \| Mouse \| Platypus \| Chicken \| Frog \| Zebra fish \| Fruit fly \| Honey bee \| Nematode worm \| Sea urchin \| Thale cress \| Budding yeast |