# Recombinant Human ERK1 (N-GST tag)

**Cat No:HR2R1372**

For research use only

## Overview

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|---|---|
| Quantity | 10 ?g |
| Gene Symbol | ERK1 |
| Gene ID | N/A |
| Accession | NM_002746 |
| Alternative Name | MAPK3; PRKM3; P44ERK1; P44MAPK; HS44KDAP; HUMKER1A; MGC20180 |
| Species | Human |
| Source | Insect cells |
| Description | ERK1 is a protein serine/threonine kinase that is a member of the extracellular signal-regulated kinases (ERKs), also known as mitogen-activated protein kinase 3 (MAPK3) which are activated in response to numerous growth factors and cytokines. ERK1 is ubiquitously distributed in tissues with the highest expression in heart, brain and spinal cord. Activated ERK1 translocates into the nucleus where it phosphorylates various transcription factors (e.g., Elk-1, c-Myc, c-Jun, c-Fos, and C/EBP beta). ERK pathway is necessary for experience-dependent plasticity and for long-term potentiation of synaptic transmission in the developing visual cortex . ERK activation affects the axonal growth by phosphorylation of microtubule-associated proteins and neurofilaments . |
| Functions | The specific activity of ERK1 was determined to be 840 nmol /min/mg as per activity assay protocol. |
| Formulation | 50mM Tris-HCl, pH 7.5, 150mM NaCl, 10mM glutathione, 0.1mM EDTA, 0.25mM DTT, 0.1mM PMSF, 25% glycerol. |
| Solubility | N/A |
| Appearance | Liquid |
| Molecular Weight | 72 |
| Purity | 70% - 90% |
| Concentration | |
| Shipping Condition | Dry Ice |
| Storage Condition | Store product at ?70?C. For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. |