

Datasheet for ABIN6700265

ERK1 Protein (Lys71Ala-Mutant) (His tag)[Go to Product page](#)

Overview

Quantity:	20 µg
Target:	ERK1 (MAPK3)
Protein Characteristics:	Lys71Ala-Mutant
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This ERK1 protein is labelled with His tag.
Application:	Western Blotting (WB)

Product Details

Purpose:	ERK1 (K71A) recombinant protein-HIS Epitope
Purification:	Recombinant full-length human ERK1 was expressed in E. coli cells using an N-Terminal his epitope. The purity was determined to be >85% by densitometry.
Purity:	>85%

Target Details

Target:	ERK1 (MAPK3)
Alternative Name:	MAPK3 (MAPK3 Products)
Background:	Synonyms: PRKM3, P44ERK1, P44MAPK, MAPK3, Mitogen-activated protein kinase 3, MAP kinase 3, ERT2, Extracellular signal-regulated kinase 1, ERK-1, Insulin-stimulated MAP2 kinase, MAP kinase isoform p44, p44-MAPK, Microtubule-associated protein 2 kinase, p44-ERK1

Target Details

Background: ERK1 is a protein serine/threonine kinase that is a member of the extracellular signal-regulated kinases (ERKs) which are activated in response to numerous growth factors and cytokines (1). Activation of ERK1 requires both tyrosine and threonine phosphorylation that is mediated by MEK. 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). ERK1 Protein is ideal for investigators involved in Signaling Reagents, Protein Substrates, Angiogenesis, Apoptosis/Autophagy, Cancer, Cardiovascular Disease, ERK/MAPK Pathway, Invasion/Metastasis, Neurobiology, and Ser/Thr Kinases research.

NCBI Accession: [NM_002746](#)

Pathways: [MAPK Signaling](#), [RTK Signaling](#), [Interferon-gamma Pathway](#), [Fc-epsilon Receptor Signaling Pathway](#), [Neurotrophin Signaling Pathway](#), [Response to Growth Hormone Stimulus](#), [Activation of Innate immune Response](#), [Cellular Response to Molecule of Bacterial Origin](#), [Hepatitis C](#), [Protein targeting to Nucleus](#), [Toll-Like Receptors Cascades](#), [Signaling Events mediated by VEGFR1 and VEGFR2](#), [Signaling of Hepatocyte Growth Factor Receptor](#), [VEGFR1 Specific Signals](#), [S100 Proteins](#)

Application Details

Application Notes: Western_Blot_Dilution: User Optimized
Other: Kinase Assay-User Optimized
Application_Note: ERK1 Protein is suitable for use in Western Blot and Kinase Assay. Expect a band approximately ~ 44 kDa on specific lysates or tissues. Specific conditions for reactivity should be optimized by the end user.

Restrictions: For Research Use only

Handling

Format: Liquid

Concentration: 0.2 µg/µL

Buffer: ERK1 Protein is stored in 50 mM sodium phosphate, pH 7.0, 300 mM NaCl, 150 mM imidazole, 0.1 mM PMSF, 0.25 mM DTT, 25 % glycerol.

Storage: -80 °C

Storage Comment: Store product at -70°C. For optimal storage, aliquot target into smaller quantities after

Handling

centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

Expiry Date: 12 months