abcam

Product datasheet

Recombinant human ERK2 protein ab155812

1 References 3 Images

Description

Product name	Recombinant human ERK2 protein
Purity	> 95 % SDS-PAGE.
Expression system	Escherichia coli
Accession	NM_002745
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Tags	GST tag N-Terminus

Specifications

Our **Abpromise guarantee** covers the use of **ab155812** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	Functional Studies
Form	Liquid
Additional notes	ab155812 has been activated by MEK1 in vitro. 630 nmol/min/mg **ab64311** (Myelin Basic Protein protein) can be utilized as a substrate for assessing kinase activity

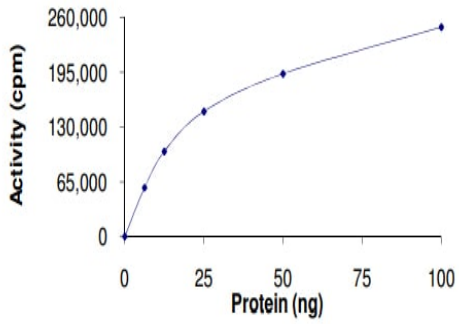
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80ºC. Avoid freeze / thaw cycles. pH: 7.5 Constituents: 0.30732% Glutathione, 0.004% DTT, 0.788% Tris HCl, 0.003% EDTA, 25% Glycerol (glycerin, glycerine), 0.8766% Sodium chloride This product is an active protein and may elicit a biological response in vivo, handle with caution.

General Info

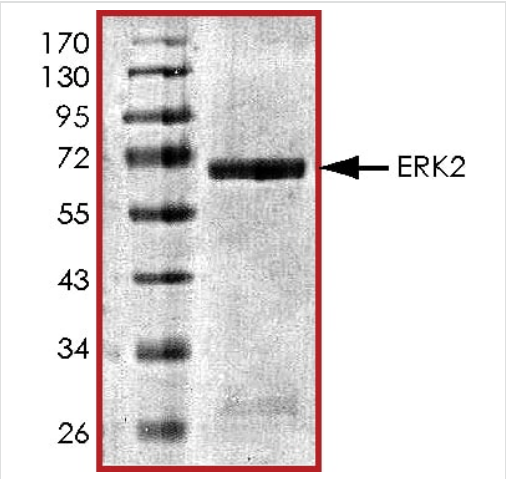
Function	Involved in both the initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors such as ELK1. Phosphorylates EIF4EBP1; required for initiation of translation. Phosphorylates microtubule-associated protein 2 (MAP2). Phosphorylates SPZ1 (By similarity). Phosphorylates heat shock factor protein 4 (HSF4) and ARHGEF2. Acts as a transcriptional repressor. Binds to a [GC]AAA[GC] consensus sequence. Repress the expression of interferon gamma-induced genes. Seems to bind to the promoter of CCL5, DMP1, IFIH1, IFITM1, IRF7, IRF9, LAMP3, OAS1, OAS2, OAS3 and STAT1. Transcriptional activity is independent of kinase activity.
Sequence similarities	Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily. Contains 1 protein kinase domain.
Domain	The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.
Post-translational modifications	Dually phosphorylated on Thr-185 and Tyr-187, which activates the enzyme. Dephosphorylated by PTPRJ at Tyr-187.
Cellular localization	Nucleus.

Images



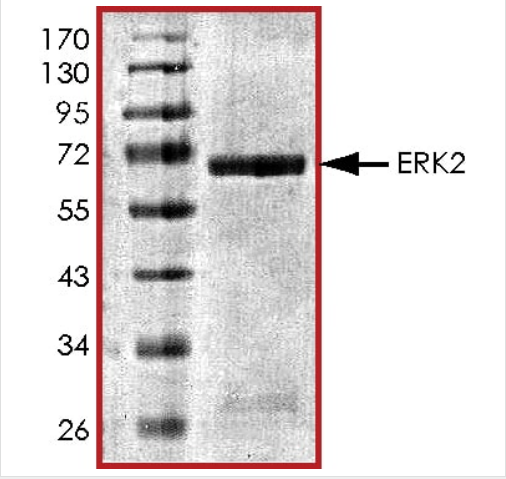
Functional Studies - Recombinant human ERK2 protein (ab155812)

The specific activity of ERK2 (ab155812) was determined to be 630 nmol/min/mg as per activity assay protocol



SDS-PAGE - Recombinant human ERK2 protein (ab155812)

SDS PAGE analysis of ab155812



SDS-PAGE - Recombinant human ERK2 protein (ab155812)

SDS PAGE analysis of ab155812

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