abcam

Product datasheet

Recombinant human ERK1 protein ab116536

2 References 1 Image

Description

Product name	Recombinant human ERK1 protein
Biological activity	Specific activity: 379.25 units/ml; 621.73 Units/mg
Purity	> 80 % Proprietary Purification.
Endotoxin level	< 1.000 Eu/µg
Expression system	Escherichia coli
Accession	P27361
Protein length	Full length protein
Animal free	No
Nature	Recombinant
Species	Human
Sequence	MSPILGYWKIKGLVQPTRLLLEYLEEKYEEHLYERDEGDK WRNKKFELGL EFPNLPYYIDGDVKLTQSMAIIRYIADKHNMLGGCPKERAEI SMLEGAVL DIRYGVSRIAYSKDFETLKVDFLSKLPEMLKMFEDRLCHKT YLNGDHVTH PDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIPQIDK YLKSSKYIA WPLQGWQATFGGGDHPPKSDLEVLFQGPLGSAAAAAQ GGGGGEPRRTEGV GPGVPGEVEMVKGQPFDVGPRYTQLQYIGEGAYGMVSS AYDHVRKTRVAI KKISPFEHQTYCQRTLREIQILLRFRHENVIGIRDILRASTLEA MRDVYI VQDLMETDLYKLLKSQQLSNDHICYFLYQILRGLKYIHSANV LHRDLKPS NLLSNTTCDLKICDFGLARIADPEHDHTGFLTEYVATRWYR APEIMLNSK GYTKSIDIWSVGCILAEMLSNRPIFPGKHYLDQLNHILGILGS PSQEDLN CIINMKARNYLQSLPSKTKVAWAKLFPKSDSKALDLLDRM LTFNPNKRIT

VEEALAHPYLEQYYDPTDEPVAEEPFTFAMELDDLPKERL
KELIFQETAR FQPGVLEAP

Predicted molecular weight	70 kDa including tags
Amino acids	2 to 379

Specifications

Our **Abpromise guarantee** covers the use of **ab116536** in the following tested applications.

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

Applications	SDS-PAGE Functional Studies Mass Spectrometry
Mass spectrometry	MALDI-TOF-TOF
Form	Liquid
Additional notes	ab116536 was alkylated, digested with trypsin and the mass of the resultant peptides determined by MADLI-TOF/TOF. The peptides obtained gave 27% sequence coverage of ERK1. Theoretical pI: 6.06

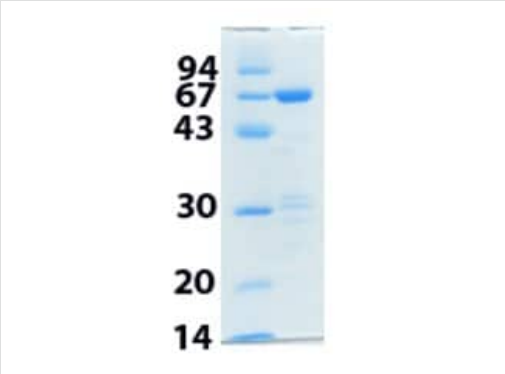
Preparation and Storage

Stability and Storage	Shipped on Dry Ice. Upon delivery aliquot. Store at -80°C. Avoid freeze / thaw cycle. pH: 7.50 Constituents: 0.002% Brij, 0.012% Benzamidine, 0.003% EGTA, 0.003% PMSF, 0.1% Beta mercaptoethanol, 0.79% Tris HCl, 9.24% Sucrose, 0.88% 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 ELK-1. Phosphorylates EIF4EBP1; required for initiation of translation. Phosphorylates microtubule-associated protein 2 (MAP2). Phosphorylates SPZ1 (By similarity). Phosphorylates heat shock factor protein 4 (HSF4).
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-202 and Tyr-204, which activates the enzyme. Dephosphorylated by PTPRJ at Tyr-204.

Images



SDS-PAGE - Recombinant human ERK1 protein (ab116536)

12% SDS-PAGE gel showing ab116536.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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