

Product datasheet

Recombinant human ERK1 protein ab116536

[1 References](#) [1 Image](#)

Overview

| | |
|-----------------------|--------------------------------|
| Product name | Recombinant human ERK1 protein |
| Protein length | Full length protein |

Description

| | |
|---------------|------------------|
| Nature | Recombinant |
| Source | Escherichia coli |

Amino Acid Sequence

| | |
|-------------------------|---|
| Accession | P27361 |
| Species | Human |
| Sequence | MSPILGYWKIKGLVQPTRLLEYLEEKYEEHLYERDEGDKWRNKKFELGL EFPNLPYYIDGDVKLTQSMIIRYADKHNMLGGCPKERAEISMLEGAVL DIRYGVSRIAYSKDFETLKVDFLSKLPEMLKMFEDRLCHKTYLNGDHVTH PDFMLYDALDVVLYMDPMCLDAFPKLVCFKKRIEAIQIDKYLKSSKYIA WPLQGWAQTFGGGDHPPKSDLEVLFGGPLGSAAAAAQGGGGGEPRTGEGV GPGVPGEVEMVKGQPFVGPVRYTQLQYIGEGAYGMVSSAYDHVRKTRVAI KKISPFEHQTYCQRTLREIQILLRFRHENVIGIRDILRASTLEAMRDVYI VQDLMETDLYKLLKSQQLSNDHICYFLYQILRGLKYHSANVLRDLKPS NLLSNTTCDLKICDFGLARIADPEHDHTGFLTEYVATRWYRAPEIMLNSK GYTKSIDIWSVGCILAEMLSNRPIFPGKHYLDQLNHILGILGSPSQEDLN CIINMKARNYLQSLPSKTKVAWAKLFPKSDSKALDLLDRMLTFNPNKRIT VEEALAHPLYEQYYDPTDEPVAEEPFTFAMELDDLPKERLKELIFQETAR FQPGVLEAP |
| 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.

| | |
|----------------------------|---|
| Biological activity | Specific activity: 379.25 units/ml; 621.73 Units/mg |
| Applications | SDS-PAGE |

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| | Functional Studies |
| | Mass Spectrometry |
| Mass spectrometry | MALDI-TOF-TOF |
| Purity | > 80 % Proprietary Purification. |
| 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 |

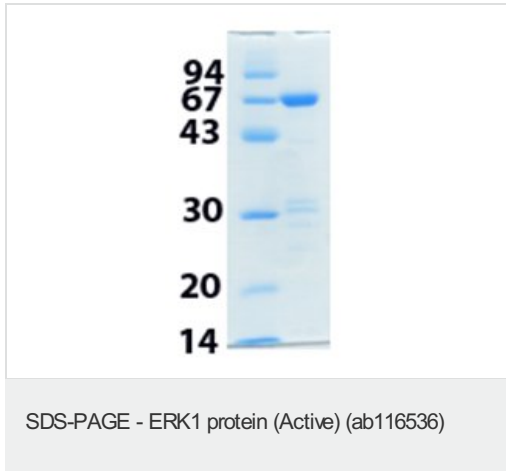
Preparation and Storage

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| 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

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| 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



12% SDS-PAGE gel showing ab116536.

Please note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE"

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