# abcam

# Product datasheet

# Recombinant Human ERK2 protein ab43624

# 1 Image

**Description** 

Product name Recombinant Human ERK2 protein

**Purity** > 90 % Densitometry.

Expression system Escherichia coli

Protein length Full length protein

Animal free No

**Nature** Recombinant

**Species** Human

### **Specifications**

Our **Abpromise guarantee** covers the use of **ab43624** in the following tested applications.

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

**Applications** Western blot

Form Liquid

Additional notes ab43624 (Human ERK2 full length protein) can be utilized as a substrate for the active protein

kinase <a href="mailto:ab60013"><u>ab60013</u></a> (Active human MEK2 full length protein)

## **Preparation and Storage**

**Stability and Storage** Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.0038% EGTA, 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 0.00292%

EDTA, 25% Glycerol (glycerin, glycerine), 0.87% Sodium chloride

#### **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

1

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

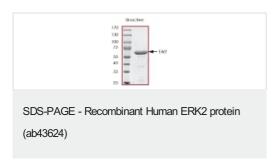
MAP kinases.

Post-translational Dually phosphorylated on Thr-185 and Tyr-187, which activates the enzyme. Dephosphorylated by

**modifications** PTPRJ at Tyr-187.

Cellular localization Nucleus.

#### **Images**



The purity of ab43624 was determined to be >90% by SDS-PAGE. MW  $\sim$ 68kDa.

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