

# Recombinant human ERK5 protein ab126913

**1 References**   [画像数 5](#)

### 製品の詳細

製品名	Recombinant human ERK5 protein
生理活性	The specific activity of ab126913 was determined to be 11 nmol/min/mg
精製度	> 75 % Densitometry. Purity was determined to be >75% by densitometry. Affinity purified.
発現系	Baculovirus infected Sf9 cells
アクセッション番号	<b><u>Q13164</u></b>
タンパク質長	Full length protein
Animal free	No
由来	Recombinant
生物種	Human
予測される分子量	132 kDa including tags
領域	1 to 816

### 特性

Our **Abpromise guarantee** covers the use of **ab126913** in the following tested applications.

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

アプリケーション	Functional Studies Western blot SDS-PAGE
製品の状態	Liquid
備考	<b><u>ab64311</u></b> (Myelin Basic Protein protein) can be utilized as a substrate for assessing kinase activity

### 前処理および保存

保存方法および安定性	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 7.50 Constituents: 0.31% Glutathione, 0.002% PMSF, 0.004% DTT, 0.79% Tris HCl, 0.003% EDTA, 25% Glycerol, 0.88% Sodium chloride
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This product is an active protein and may elicit a biological response in vivo, handle with caution.

## 関連情報

### 機能

Plays a role in various cellular processes such as proliferation, differentiation and cell survival. The upstream activator of MAPK7 is the MAPK kinase MAP2K5. Upon activation, it translocates to the nucleus and phosphorylates various downstream targets including MEF2C. EGF activates MAPK7 through a Ras-independent and MAP2K5-dependent pathway. May have a role in muscle cell differentiation. May be important for endothelial function and maintenance of blood vessel integrity. MAP2K5 and MAPK7 interact specifically with one another and not with MEK1/ERK1 or MEK2/ERK2 pathways.

### 組織特異性

Expressed in many adult tissues. Abundant in heart, placenta, lung, kidney and skeletal muscle. Not detectable in liver.

### 配列類似性

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.

Contains 1 protein kinase domain.

### ドメイン

The second proline-rich region may interact with actin targeting the kinase to a specific location in the cell.

The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.

### 翻訳後修飾

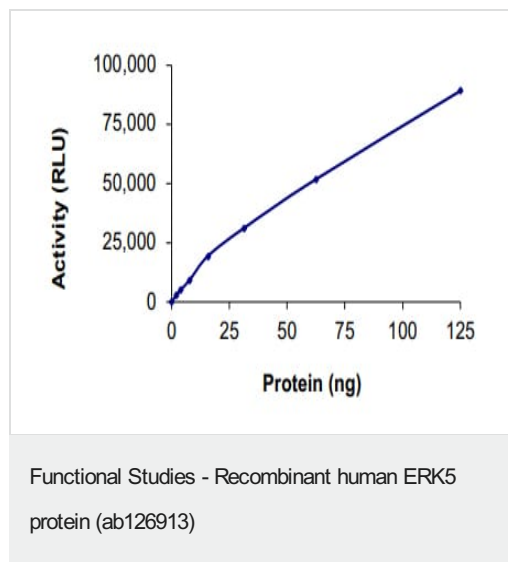
Dually phosphorylated on Thr-219 and Tyr-221, which activates the enzyme (By similarity).

Autophosphorylated in vitro on threonine and tyrosine residues when the C-terminal part of the kinase, which could have a regulatory role, is absent.

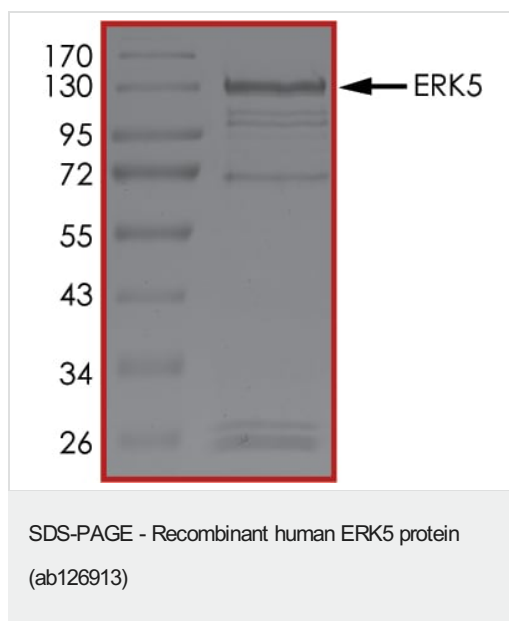
### 細胞内局在

Cytoplasm. Nucleus. Translocates to the nucleus upon activation.

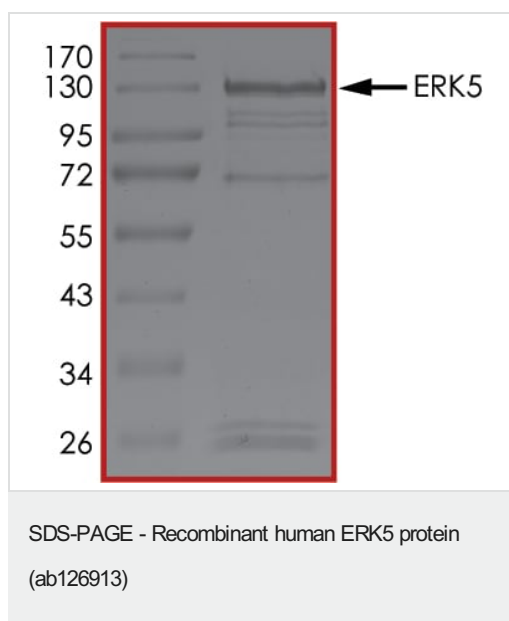
## 画像



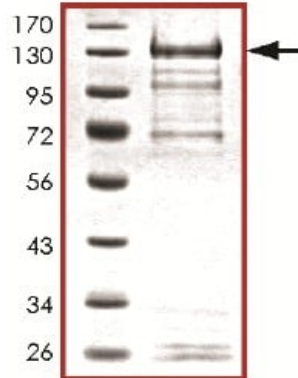
The specific activity of ERK5 (ab126913) was determined to be 2.5 nmol/min/mg as per activity assay protocol and was equivalent to 12.7 nmol/min/mg as per radiometric assay



SDS PAGE analysis of ab126913

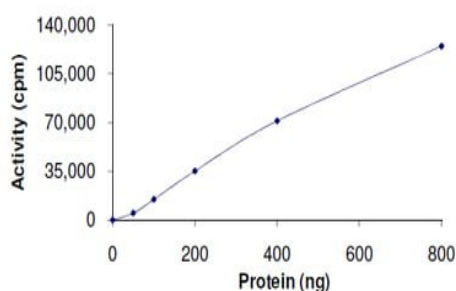


SDS PAGE analysis of ab126913



SDS-PAGE using ab126913

SDS-PAGE - Recombinant human ERK5 protein  
(ab126913)



The specific activity of ab126913 was determined to be 11  
nmol/min/mg

Functional Studies - Recombinant human ERK5  
protein (ab126913)

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

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