# abcam

# Product datasheet

# Recombinant human SRPK2 protein ab85293

### 5 图像

## 描述

产品名称 重组人SRPK2蛋白

生物活性 Specific activity: 155nmol/min/mg.

纯**度** > 90 % Densitometry.

Affinity purified.

表达系统 Baculovirus infected Sf9 cells

**蛋白长度** Full length protein

无动物成分 No

性质 Recombinant

种属 Human

#### 技术指标

Our Abpromise guarantee covers the use of ab85293 in the following tested applications.

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

应**用** Western blot

**Functional Studies** 

形式 Liquic

补充说明 <u>ab64311</u> (Myelin Basic Protein protein) can be utilized as a substrate for assessing kinase

activity

#### 制备和贮存

稳**定性和存储** Shipped on dry ice. Upon delivery aliquot and store at -80℃. Avoid freeze / thaw cycles.

pH: 7.50

Constituents: 0.00174% PMSF, 0.00385% DTT, 0.79% Tris HCl, 25% Glycerol (glycerin,

glycerine), 0.87% Sodium chloride

This product is an active protein and may elicit a biological response in vivo, handle with caution.

#### 常规信息

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#### 功能

Serine/arginine-rich protein-specific kinase which specifically phosphorylates its substrates at serine residues located in regions rich in arginine/serine dipeptides, known as RS domains and is involved in the phosphorylation of SR splicing factors and the regulation of splicing. Promotes neuronal apoptosis by up-regulating cyclin-D1 (CCND1) expression. This is done by the phosphorylation of SRSF2, leading to the suppression of p53/TP53 phosphorylation thereby relieving the repressive effect of p53/TP53 on cyclin-D1 (CCND1) expression. Phosphorylates ACIN1, and redistributes it from the nuclear speckles to the nucleoplasm, resulting in cyclin A1 but not cyclin A2 up-regulation. Plays an essential role in spliceosomal B complex formation via the phosphorylation of DDX23/PRP28. Can mediate hepatitis B virus (HBV) core protein phosphorylation. Plays a negative role in the regulation of HBV replication through a mechanism not involving the phosphorylation of the core protein but by reducing the packaging efficiency of the pregenomic RNA (pgRNA) without affecting the formation of the viral core particles.

组织特异性

Highly expressed in brain, moderately expressed in heart and skeletal muscle and at low levels in lung, liver, and kidney.

序列相似性

Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. Contains 1 protein kinase domain.

翻译后修饰

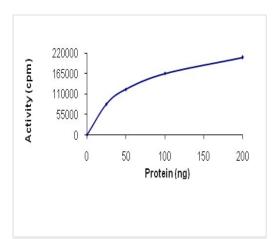
Phosphorylation at Thr-492 by PKB/AKT1 enhances its stimulatory activity in triggering cyclin-D1 (CCND1) expression and promoting apoptosis in neurons, which can be blocked by YWHAB. It also enhances its protein kinase activity toward ACIN1 and SRSF2, promotes its nuclear translocation and prevents its proteolytic cleavage.

Proteolytically cleaved at Asp-139 and Asp-403 by caspase-3 during apoptotic cell death. Cleavage at Asp-139 which is the major site of cleavage, produces a small N-terminal fragment that translocates into nucleus and promotes VP16-induced apoptosis.

细胞定位

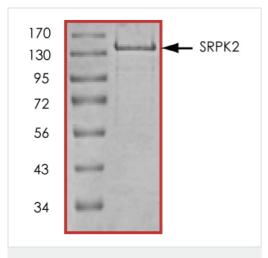
Cytoplasm. Nucleus. Shuttles between the nucleus and the cytoplasm. KAT5/TIP60 inhibits its nuclear translocation. Phosphorylation at Thr-492 by PKB/AKT1 promotes nuclear translocation.

#### 图片



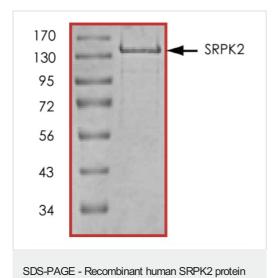
Functional Studies - Recombinant human SRPK2 protein (ab85293)

The specific activity of SRPK2 (ab85293) was determined to be 155 nmol/min/mg as per activity assay protocol

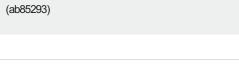


SDS PAGE analysis of ab85293

SDS-PAGE - Recombinant human SRPK2 protein (ab85293)

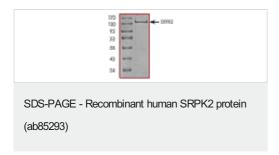


SDS PAGE analysis of ab85293



220,000 165,000 1110,000 0 50 100 150 200 Protein (ng)

Functional Studies - Recombinant human SRPK2 protein (ab85293)



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