# abcam

# Product datasheet

# Recombinant Human Securin protein ab87664

1 References 1 图像

描述

产品名称 重组人Securin蛋白

纯**度** > 80 % SDS-PAGE.

Purified by using conventional chromatography techniques.

内毒素水平 < 1.000 Eu/μg 表达系统 Escherichia coli

**蛋白长度** Full length protein

无动物成分 No

性质 Recombinant

种属 Human

序列 MGSSHHHHHH SSGLVPRGSH MATLIYVDKE

NGEPGTRVVA KDGLKLGSGP SIKALDGRSQ
VSTPRFGKTF DAPPALPKAT RKALGTVNRA
TEKSVKTKGP LKQKQPSFSA KKMTEKTVKA
KSSVPASDDA YPEIEKFFPF NPLDFESFDL
PEEHQIAHLP LSGVPLMILD EERELEKLFQ
LGPPSPVKMP SPPWESNLLQ SPSSILSTLD

VELPPVCCDI DI

标签 His tag N-Terminus

技术指标

Our **Abpromise guarantee** covers the use of **ab87664** in the following tested applications.

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

应用 SDS-PAGE

形式 Liquid

制备和贮存

稳定性和存储 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

pH: 8.00

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Constituents: 0.316% Tris HCl, 20% Glycerol (glycerin, glycerine), 0.58% Sodium chloride, 0.0017% PMSF, 0.029% EDTA

### 常规信息

## 功能

Regulatory protein, which plays a central role in chromosome stability, in the p53/TP53 pathway, and DNA repair. Probably acts by blocking the action of key proteins. During the mitosis, it blocks Separase/ESPL1 function, preventing the proteolysis of the cohesin complex and the subsequent segregation of the chromosomes. At the onset of anaphase, it is ubiquitinated, conducting to its destruction and to the liberation of ESPL1. Its function is however not limited to a blocking activity, since it is required to activate ESPL1. Negatively regulates the transcriptional activity and related apoptosis activity of TP53. The negative regulation of TP53 may explain the strong transforming capability of the protein when it is overexpressed. May also play a role in DNA repair via its interaction with Ku, possibly by connecting DNA damage-response pathways with sister chromatid separation.

## 组织特异性

Expressed at low level in most tissues, except in adult testis, where it is highly expressed. Overexpressed in many patients suffering from pituitary adenomas, primary epithelial neoplasias, and esophageal cancer.

#### 序列相似性

Belongs to the securin family.

# 发展阶段

Low level during G1 and S phases. Peaks at M phase. During anaphase, it is degraded.

# 结构域

The N-terminal destruction box (D-box) acts as a recognition signal for degradation via the ubiquitin-proteasome pathway.

The TEK-boxes are required for 'Lys-11'-linked ubiquitination and facilitate the transfer of the first ubiquitin and ubiquitin chain nucleation. TEK-boxes may direct a catalytically competent orientation of the UBE2C/UBCH10-ubiquitin thiolester with the acceptor lysine residue.

# 翻译后修饰

Phosphorylated at Ser-165 by CDK1 during mitosis.

Phosphorylated in vitro by ds-DNA kinase.

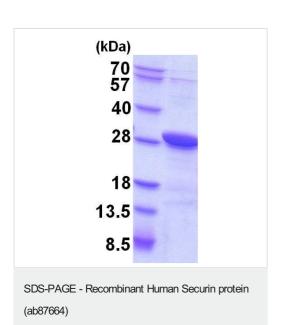
Ubiquitinated through 'Lys-11' linkage of ubiquitin moieties by the anaphase promoting complex (APC) at the onset of anaphase, conducting to its degradation. 'Lys-11'-linked ubiquitination is

mediated by the E2 ligase UBE2C/UBCH10.

## 细胞定位

Cytoplasm. Nucleus.

# 图片



ab87664 on 15% SDS-PAGE (3µg)

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