

Product datasheet

Recombinant Human Securin protein ab116478

概述

产品名称	重组人Securin蛋白
蛋白长度	Full length protein

描述

性质	Recombinant
来源	Escherichia coli

氨基酸序列

Accession [O95997](#)

种属 Human

序列
 MGSSHHHHHSSGLVPRGSHMATLIYVDKENGEPGTRVVAKDGLKLGSGP
 SIKALDGRSQVSTPRFGKTFDAPPALPKATRKALGTVNRATEKSVKTKGP
 LKQKQPSFSAKKMTEKTVKAKSSVPASDDAYPEIEKFFPFNPLDFESFDL
 PEEHQIAHLPLSGVPLMILDEERELEKLFQLGPPSPVKMPSPPWESNLLQ
 SPSSILSTLDVELPPVCCDIDI

分子量 24 kDa including tags

氨基酸 1 to 202

标签 His tag N-Terminus

技术指标

Our [Abpromise guarantee](#) covers the use of **ab116478** 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
纯度	> 80 % SDS-PAGE. ab116478 is purified by proprietary chromatographic techniques.
形式	Liquid
补充说明	although stable 4°C for 4 weeks, should be stored desiccated below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

制备和贮存

稳定性和存储

Shipped at 4°C. Please see notes section.

pH: 8.00

Constituents: 0.32% Tris HCl, 10% Glycerol, 0.58% Sodium chloride

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.

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