

Product datasheet

Anti-Securin antibody ab227773

1 Image

Overview

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<b>Product name</b>	Anti-Securin antibody
<b>Description</b>	Rabbit polyclonal to Securin
<b>Host species</b>	Rabbit
<b>Tested applications</b>	<b>Suitable for:</b> IHC-P
<b>Species reactivity</b>	<b>Reacts with:</b> Human
<b>Immunogen</b>	Synthetic peptide within Human Securin aa 100-200 (internal sequence). The exact sequence is proprietary. Database link: <a href="#">O95997</a>
<b>Positive control</b>	IHC-P: Human rectal carcinoma tissue.
<b>General notes</b>	<b>This product is FOR RESEARCH USE ONLY. For commercial use, please contact <a href="mailto:partnerships@abcam.com">partnerships@abcam.com</a>.</b>

Properties

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<b>Form</b>	Liquid
<b>Storage instructions</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>Storage buffer</b>	pH: 7.6 Preservative: 0.1% Sodium azide Constituents: PBS, 1% BSA
<b>Purity</b>	Immunogen affinity purified
<b>Clonality</b>	Polyclonal
<b>Isotype</b>	IgG

Applications

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Our [Abpromise guarantee](#) covers the use of **ab227773** in the following tested applications.

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

Application	Abreviews	Notes
IHC-P		1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol. Primary antibody incubation for 30 minutes at room temperature.

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## Target

### Function

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.

### Tissue specificity

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.

### Sequence similarities

Belongs to the securin family.

### Developmental stage

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

### Domain

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.

### Post-translational modifications

Phosphorylated at Ser-165 by CDK1 during mitosis.

Phosphorylated in vitro by ds-DNA kinase.

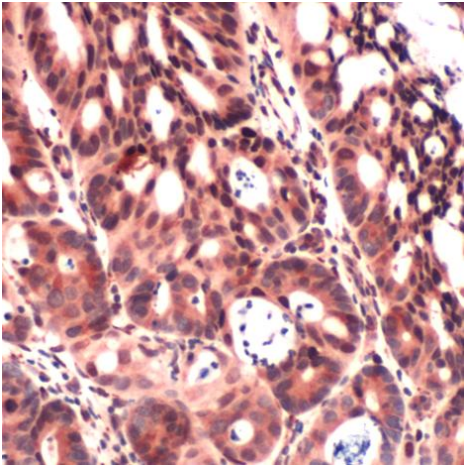
Ubiquitinated through 'Lys-11' linkage of ubiquitin moieties by the anaphase promoting complex (APC) at the onset of anaphase, conducting to its degradation. 'Lys-11'-linked ubiquitination is mediated by the E2 ligase UBE2C/UBCH10.

### Cellular localization

Cytoplasm. Nucleus.

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## Images



Formalin-fixed, paraffin-embedded human rectal carcinoma tissue stained for Securin using ab227773 at 1/100 dilution in immunohistochemical analysis.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Securin antibody (ab227773)

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

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