


Anti-Securin antibody ab26273

★★★★☆ [6 Abreviews](#) [5 References](#) [5 Images](#)

Overview

Product name	Anti-Securin antibody
Description	Rabbit polyclonal to Securin
Host species	Rabbit
Tested applications	Suitable for: WB, ICC/IF
Species reactivity	Reacts with: Human Predicted to work with: Mouse, Rat 
Immunogen	Synthetic peptide conjugated to KLH derived from within residues 100 - 200 of Human Securin. Read Abcam's proprietary immunogen policy
Positive control	WB: Wild-type HEK293T cell lysate. Daudi and HEK293 cell lysates. ICC/IF: HeLa cells.
General notes	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.4 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified
Clonality	Polyclonal

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab26273 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
WB	★★★★☆ (4)	Use at an assay dependent concentration. Detects a band of approximately 26 kDa (predicted molecular weight: 22 kDa).
ICC/IF	★★★★★ (1)	1/100.

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.

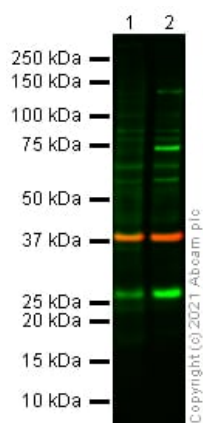
Phosphorylated in vitro by ds-DNA kinase.

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.

Images



Western blot - Anti-Securin antibody (ab26273)

All lanes : Anti-Securin antibody (ab26273) at 1 µg/ml

Lane 1 : HEK293 whole cell lysate with Milk

Lane 2 : Daudi whole cell lysate with Milk

Lysates/proteins at 20 µg per lane.

Blocking peptides at 3 % per lane.

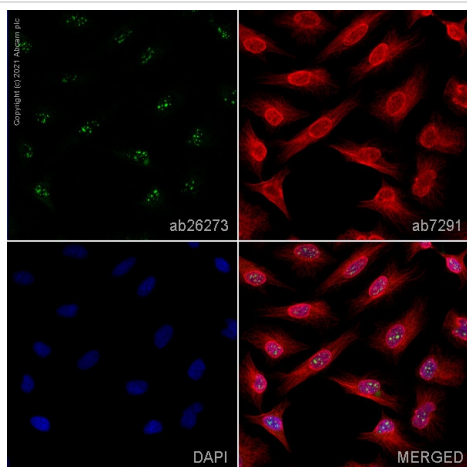
Secondary

All lanes : Goat anti-Rabbit IgG H&L (IRDye® 680CW) preadsorbed at 1/10000 dilution

Predicted band size: 22 kDa

Observed band size: 26 kDa

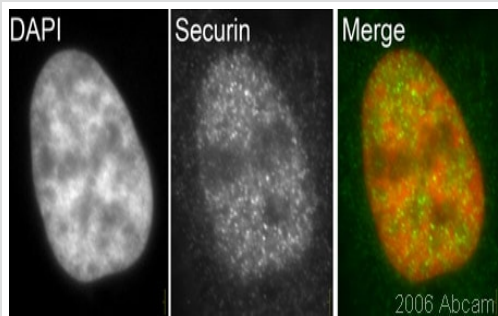
Loading control: GAPDH ([ab8245](#)), secondary goat anti-Mouse IgG H&L (IRDye® 680CW) at 1:10,000.



Immunocytochemistry/ Immunofluorescence - Anti-Securin antibody (ab26273)

ab26273 staining Securin in HeLa cells. The cells were fixed with 100% methanol (5 min), permeabilized with 0.1% PBS-Triton X-100 for 5 minutes and then blocked with 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween for 1h. The cells were then incubated overnight at 4°C with ab26273 at 1µg/ml and [ab7291](#), Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control. Cells were then incubated with [ab150081](#), Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 488), pre-adsorbed at 1/1000 dilution (shown in green) and [ab150080](#), Goat polyclonal Secondary Antibody to Rabbit IgG - H&L (Alexa Fluor® 594) at 1/1000 dilution (shown in pseudocolour red). Nuclear DNA was labelled with DAPI (shown in blue).

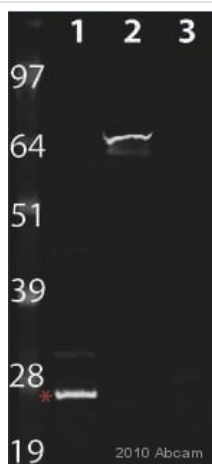
Image was acquired with a high-content analyser (Operetta CLS, Perkin Elmer) and a maximum intensity projection of confocal sections is shown.



Immunocytochemistry/ Immunofluorescence - Anti-Securin antibody (ab26273)

This image is courtesy of Kirk McManus

HeLa cells stained with ab26273 (1/100 dilution). A clear nuclear signal in interphase HeLa cells can be seen.



Western blot - Anti-Securin antibody (ab26273)

This image is courtesy of an abreview submitted by Andrew Horwitz

All lanes : Anti-Securin antibody (ab26273) at 1/500 dilution

Lane 1 : HEK293 human cell lysate

Lane 2 : MPRO mouse cell lysate

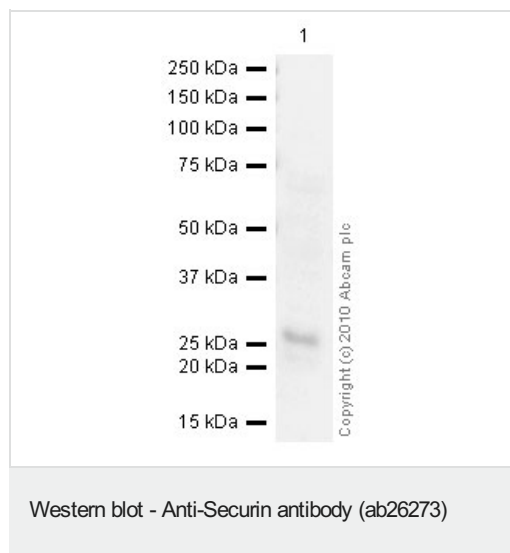
Lane 3 : S. Cerevisiae lysate

Lysates/proteins at 50 µg per lane.

Secondary

All lanes : Polyclonal Goat anti Rabbit at 1/10000 dilution

Predicted band size: 22 kDa



Anti-Securin antibody (ab26273) at 1 µg/ml + HEK293 (Human embryonic kidney cell line) Whole Cell Lysate at 20 µg

Secondary

Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Performed under reducing conditions.

Predicted band size: 22 kDa

Observed band size: 26 kDa

Exposure time: 15 minutes

ab26273 detects a clean 26 kDa band in HEK293 lysate. We would recommend loading 20-40ug of protein when using this antibody. ab26273 has also been tested in mouse lysates and in our hands detects a 70 kDa band which we cannot explain.

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