abcam

Product datasheet

Anti-Securin antibody [EPR3240] ab79546



重组 RabMAb

★★★★★ 3 Abreviews 27 References 9 图像

概述

产品名称 Anti-Securin抗体[EPR3240]

描述 兔单克隆抗体[EPR3240] to Securin

宿主 Rabbit

经测试应用 适用于: Flow Cyt (Intra), ICC/IF, WB, IHC-P

种属反应性 与反应: Human

免疫原 Synthetic peptide within Human Securin aa 100-200 (N terminal). The exact sequence is

proprietary.

Database link: **O95997**

阳性对照 WB: Daudi, HCT 116, HEK-293T, and HeLa cell lysates. IHC-P: Human testis and breast

carcinoma tissues. ICC/IF: HeLa cells. Flow Cyt (intra): HeLa cells. Jurkat cells

常规说明 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Stable for 12 months at -20°C.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

纯度 Protein A purified

克隆 单克隆

克隆编号 EPR3240

同种型 IgG

应用

The Abpromise guarantee Abpromise™承诺保证使用ab79546于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
Flow Cyt (Intra)		1/50. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
ICC/IF	****(1)	1/50. For unpurified use at 1/100 - 1/250.
WB	★★★ ☆☆ (2)	1/5000 - 1/20000. Detects a band of approximately 28 kDa (predicted molecular weight: 22 kDa).
IHC-P		1/100 - 1/250. Perform heat mediated antigen retrieval before commencing with IHC staining protocol. See IHC antigen retrieval protocols.

靶标

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.

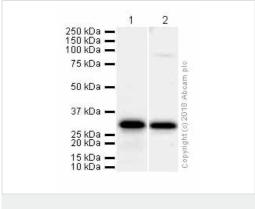
Phosphorylated in vitro by ds-DNA kinase.

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



Western blot - Anti-Securin antibody [EPR3240] (ab79546)

All lanes : Anti-Securin antibody [EPR3240] (ab79546) at 1/1000 dilution (Purified)

Lane 1 : Daudi (Human Burkitt's lymphoma lymphoblast) whole cell lysates

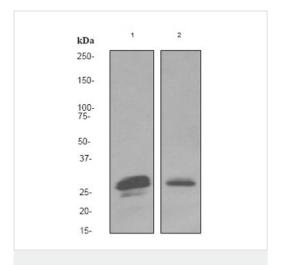
Lane 2: HCT 116 (Human colorectal carcinoma epithelial cell) whole cell lysates

Lysates/proteins at 15 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 22 kDa
Observed band size: 28 kDa



Western blot - Anti-Securin antibody [EPR3240] (ab79546)

All lanes : Anti-Securin antibody [EPR3240] (ab79546) at 1/20000 dilution ((unpurified))

Lane 1 : Daudi (Human Burkitt's lymphoma cell line) cell lysate
Lane 2 : HeLa (Human epithelial cell line from cervix

adenocarcinoma) cell lysate

Lysates/proteins at 10 µg per lane.

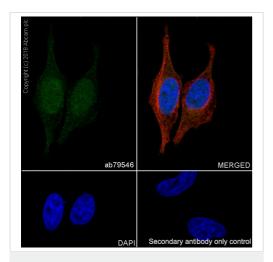
Secondary

All lanes: HRP labelled goat anti-rabbit at 1/2000 dilution

Predicted band size: 22 kDa Observed band size: 28 kDa

Additional bands at: 25 kDa. We are unsure as to the identity of

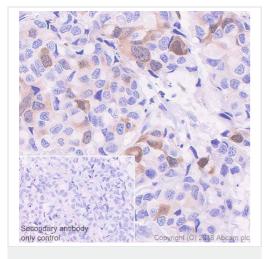
these extra bands.



Immunocytochemistry/ Immunofluorescence - Anti-Securin antibody [EPR3240] (ab79546)

Immunocytochemistry/ Immunofluorescence analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Securin with purified ab79546 at 1/50 dilution (4.74 μ g/ml). Cells were fixed in 4% Paraformaldehyde and permeabilized with 0.1% tritonX-100. Cells were counterstained with Ab195889 Anti-alpha Tubulin antibody [DM1A] - Microtubule Marker (Alexa Fluor® 594) 1/200 (2.5 μ g/ml). Goat anti rabbit lgG (Alexa Fluor® 488, **ab150077**) was used as the secondary antibody at 1/1000 (2 μ g/ml) dilution. DAPI (blue) was used as nuclear counterstain.

PBS instead of the primary antibody was used as the secondary antibody only control.

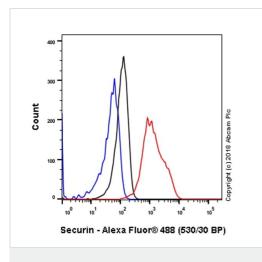


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Securin antibody

[EPR3240] (ab79546)

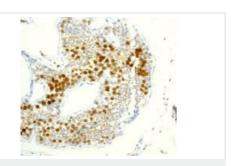
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human breast carcinoma tissue sections labeling Securin with purified ab79546 at 1/200 dilution (1.19 µg/ml). Perform heat mediated antigen retrieval using **ab93684** (Tris/EDTA buffer, pH 9.0). ImmunoHistoProbe one step HRP Polymer (ready to use) was used as the secondary antibody.

Negative control: PBS instead of the primary antibody. Hematoxylin was used as a counterstain.



Flow Cytometry (Intracellular) - Anti-Securin antibody [EPR3240] (ab79546)

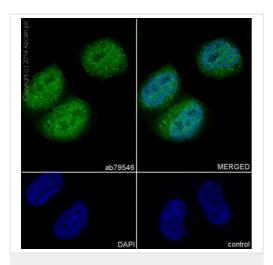
Intracellular Flow Cytometry analysis of HeLa (Human cervix adenocarcinoma epithelial cell) cells labeling Securin with purified ab79546 at 1/30 dilution (10µg/ml) (Red). Cells were fixed with 4% Paraformaldehyde and permeabilized with 90% Methanol. A Goat anti rabbit IgG (Alexa Fluorr® 488, **ab150077**) secondary antibody was used at 1/2000. Isotype control - Rabbit monoclonal IgG (Black). Unlabeled control - Cell without incubation with primary antibody and secondary antibody (Blue).



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Securin antibody
[EPR3240] (ab79546)

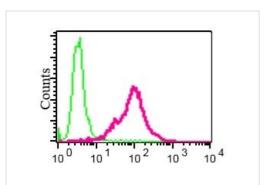
Unpurified ab79546 at 1/100 dilution staining Securin in paraffinembedded human testis tissue by Immunohistochemistry.

Perform heat mediated antigen retrieval before commencing with IHC staining protocol.



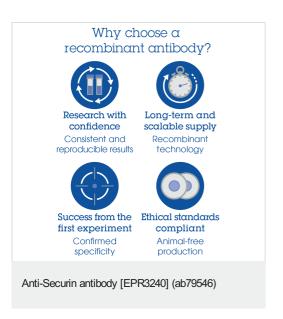
Immunocytochemistry/ Immunofluorescence - Anti-Securin antibody [EPR3240] (ab79546)

Immunofluorescent analysis of 4% paraformaldehyde-fixed HeLa (Human epithelial cell line from cervix adenocarcinoma) cells labeling securin with unpurified ab79546 at 1/250 dilution. The cells were permeabilised with 0.1% Triton X-100. Anti-rabbit Alexa Fluor[®] 488 (<u>ab150077</u>) at 1/500 dilution was used as the secondary antibody (green). The nuclear counter stain is DAPI (blue).



Flow Cytometry (Intracellular) - Anti-Securin antibody [EPR3240] (ab79546)

Intracellular flow cytometric analysis of permeabilized Jurkat (Human T cell leukemia cell line from peripheral blood) cells using unpurified ab79546 (red) or a rabbit lgG (negative) (green).



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