

Securin Rabbit pAb

Securin Rabbit pAb Catalog # AP94564

Product Information

Application WB, IHC-P, IHC-F, IF

Primary Accession 095997

Reactivity Human, Mouse

Host Rabbit
Clonality Polyclonal
Calculated MW 22024
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived from human PTTG1

Epitope Specificity 101-202/202

Isotype IgG

modifications

Purity affinity purified by Protein A

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cytoplasm. Nucleus.

SIMILARITY Belongs to the securin family.

Post-translational 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.

Important Note This product as supplied is intended for research use only, not for use in

human, therapeutic or diagnostic applications.

Background Descriptions The encoded protein is a homolog of yeast securing proteins, which prevent

separins from promoting sister chromatid separation. It is an

anaphase-promoting complex (APC) substrate that associates with a separin until activation of the APC. The gene product has transforming activity in vitro and tumorigenic activity in vivo, and the gene is highly expressed in various tumors. The gene product contains 2 PXXP motifs, which are required for its transforming and tumorigenic activities, as well as for its stimulation of basic fibroblast growth factor expression. It also contains a destruction box (D box) that is required for its degradation by the APC. The acidic C-terminal region of the encoded protein can act as a transactivation domain. The gene product is mainly a cytosolic protein, although it partially localizes in the nucleus. Three transcript variants encoding the same protein have been found for this gene.

[provided by RefSeq, Sep 2013].

Additional Information

Gene ID 9232

Other Names Securin, Esp1-associated protein, Pituitary tumor-transforming gene 1

protein, Tumor-transforming protein 1, hPTTG, PTTG1, EAP1, PTTG, TUTR1

Dilution WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500

Storage Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody

is stable for at least two weeks at 2-4 °C.

Protein Information

Name PTTG1

Synonyms EAP1, PTTG, TUTR1

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.

Cellular Location Cytoplasm. Nucleus.

Tissue Location 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.

Background

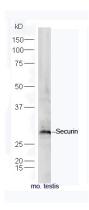
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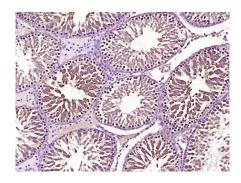
Images

Protein: testis(mouse) lysate at 30ug;

Primary: rabbit Anti- Securin (AP94564) at 1:300; Secondary: HRP conjugated Goat-Anti-rabbit

IgG(AP94564-HRP) at 1: 5000; Predicted band size: 28 kD Observed band size: 28 kD





Paraformaldehyde-fixed, paraffin embedded (Rat testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Securin) Polyclonal Antibody, Unconjugated (AP94564) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.