

Anti-Securin Antibody
Catalog # ABO11550**Specification**

Anti-Securin Antibody - Product Information

Application	WB
Primary Accession	O95997
Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Securin(PTTG1) detection. Tested with WB in Human.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-Securin Antibody - 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

Calculated MW

22024 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human

Subcellular Localization

Cytoplasm. Nucleus.

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. .

Protein Name

Securin

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human Securin(146-161aa LMILDEERELEKLFQL), different from the related rat sequence by four amino acids, and from the related mouse sequence by five amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the securin family.

Anti-Securin Antibody - 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

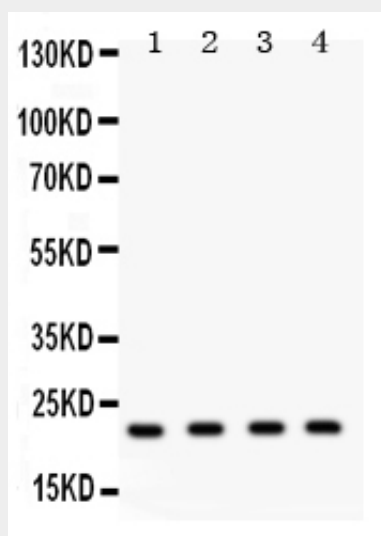
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Anti-Securin Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-Securin Antibody - Images



Anti-Securin antibody, ABO11550, Western blotting All lanes: Anti PTTG1 (ABO11550) at 0.5ug/ml
Lane 1: HELA Whole Cell Lysate at 40ug
Lane 2: MCF-7 Whole Cell Lysate at 40ug
Lane 3: SKOV Whole Cell Lysate at 40ug
Lane 4: A375 Whole Cell Lysate at 40ug
Predicted bind size: 22KD
Observed bind size: 22KD

Anti-Securin Antibody - Background

Securin, also known as pituitary tumor-transforming 1 or EAP1 is a protein that in humans is encoded by the PTTG1 gene. PTTG1 gene is mapped to 5q33.3. The encoded protein is a homolog of yeast securin 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.