

# Securin ABfinity™ Recombinant Rabbit Monoclonal Antibody - Purified

Catalog no. 700791

(See product label for lot information)



**Clone/PAD:** 19H16L48  
**Isotype:** IgG  
**Gene ID:** 9232  
**Protein Acc. no.:** O95997  
**Qty:** 100 µg  
**Volume:** 200 µl  
**Concentration:** 0.5 mg/mL

## Formulation

PBS + 0.09% sodium azide

## Validation

Validated for use in WB and IF

## Reactivity

This antibody is specific for human and mouse Securin

## Immunogen

recombinant protein

## Immunogen sequence

aminoacids 1-202

## Sequence Homology

Bovine

## Expected Reactivity

Based on sequence identity and similarity, reactivity to bovine is expected.

## Storage

2-8°C for up to 1 month, -20°C for long term storage. Avoid repeated freezing and thawing.

## Expiration Date

Expires one year from date of receipt when stored as instructed.

## Background

Pituitary tumor-transforming gene 1 (PTTG-1) is an oncogene expressed in normal tissues containing proliferating cells and in tumors. PTTG is downstream of the MAP kinase signaling cascade and is phosphorylated at Ser162 by MAPK in vitro. Phosphorylation plays an essential role in PTTG's transactivation function. The PTTG protein contains a DNA-binding domain, and it activates transcription of the c-Myc oncogene by binding to the promoter to form a complex (1-3). Studies have demonstrated that expression of human PTTG correlates with cell proliferation in a cell cycle-dependent manner, and the association of human PTTG with Ku, the regulatory subunit of DNA-dependent protein kinase, is disrupted when a DNA double-strand breaks occurs (4).

## References

1. Domínguez, A., Ramos-Morales, F., Romero, F., Rios, R.M., Dreyfus, F., Tortolero, M., and Pintor-Toro, J.A. (1998) hpttg, a human homologue of rat pttg, is overexpressed in hematopoietic neoplasms. Evidence for a transcriptional activation function of PTTG. *Oncogene* 17: 2187-2193.
2. Pei, L., (2001). Identification of c-myc as a Down-stream Target for Pituitary Tumor-transforming Gene. *J. Biol. Chem.* 276: 8484-8491.
3. Pei, L., (2000) Activation of Mitogen-activated Protein Kinase Cascade Regulates Pituitary Tumor-transforming Gene Transactivation Function. *J. Biol. Chem.* 275: 31191-31198.
4. Romero, F., Multon, M.C., Ramos-Morales, F., Domínguez, A., Bernal, J.A., Pintor-Toro, J.A. and Tortolero, M. (2001). Human securin, hPTTG, is associated with Ku heterodimer, the regulatory subunit of the DNA-dependent protein kinase *Nucleic Acids Res.* 29: 1300-1307.

## Applications:

Following applications had been tested during development. To make sure the consistency and reliability in the future lots, each lot is tested with antigen ELISA for specificity and potency. Each lot is also tested with SDS-PAGE, to ensure high purity.

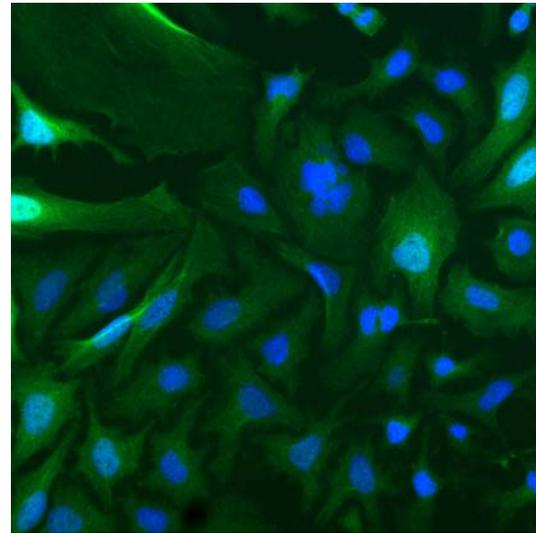
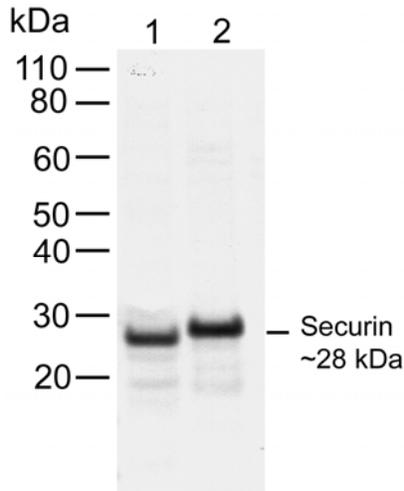
	Species	Test Material	Concentration
Western Blotting	human	Jurkat	1-5 µg/ml
Immunofluorescence	human	HeLa	2 µg/ml

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**Western blot of Jurkat cell lysate using rabbit anti-Securin (Cat. No. 700791).**

Rabbit anti-Securin (1 µg/ml) was used to label Securin in different cell and tissue lysates. Lane 1 contains 30 µg of a Jurkat cell lysate, while lane 2 contains mouse testis lysate. The western was performed using the WesternBreeze® kit with NBT/BCIP as the substrate (Cat. No. WB7105).

**Immunocytochemistry of HeLa cells labeled with rabbit anti-Securin (Cat. No. 700791).**

HeLa cells were labeled with rabbit anti-Securin (2 µg/ml) using Alexa Fluor® 488 goat anti-rabbit as the secondary antibody (Cat. No. A11008), at a 1:1000 dilution. Cells were fixed using 4% paraformaldehyde. The cytoplasmic localization of Securin is shown in green, while nuclei were stained using SlowFade® GOLD with DAPI (Cat. No. S36938), shown in blue.

**Explanation of symbols**

Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		<i>In vitro</i> diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

**For research use only. CAUTION: Not for human or animal therapeutic or diagnostic use.**

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