

**ARG62590**  
**anti-PDS1 / Securin antibody [DCS-280]**Package: 100 µl  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [DCS-280] recognizes PDS1 / Securin
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, IP, WB
Host	Mouse
Clonality	Monoclonal
Clone	DCS-280
Isotype	IgG2a
Target Name	PDS1 / Securin
Species	Human
Immunogen	Human recombinant full length Securin protein
Conjugation	Un-conjugated
Alternate Names	Tumor-transforming protein 1; Securin; TUTR1; Esp1-associated protein; PTTG; hPTTG; HPTTG; Pituitary tumor-transforming gene 1 protein; EAP1

### Application Instructions

Application Note	ICC/IF: 1/50 - 1/200 IHC-P: 1 µg/ml * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.
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### Properties

Form	Liquid
Purification	Protein A purified
Buffer	10mM PBS (pH 7.4), 0.2% BSA and 0.09% Sodium azide
Preservative	0.09% Sodium azide
Stabilizer	0.2% BSA
Concentration	0.2 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

Gene Symbol	PTTG1
Gene Full Name	pituitary tumor-transforming 1
Background	<p>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. Three transcript variants encoding the same protein have been found for this gene. [provided by RefSeq, Sep 2013]</p>
Function	<p>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. [UniProt]</p>
Research Area	Cancer antibody; Cell Biology and Cellular Response antibody; Gene Regulation antibody
Calculated Mw	22 kDa
PTM	<p>Phosphorylated at Ser-165 by CDK1 during mitosis.</p> <p>Phosphorylated in vitro by ds-DNA kinase.</p> <p>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.</p>