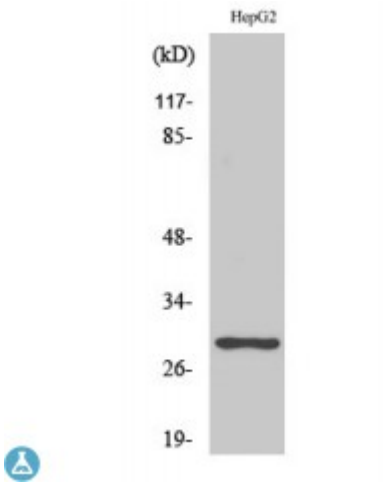
Anti-PTTG1/2/3 antibody



Description	Rabbit polyclonal to PTTG1/2/3.

Model	STJ95269
Host	Rabbit
Reactivity	Human
Applications	ELISA, IF, IHC, WB
Immunogen	Synthesized peptide derived from human PTTG1/2/3
Immunogen Region	80-160 aa, Internal
Gene ID	9232
Gene Symbol	PTTG1
Dilution range	WB 1:500-1:2000IHC 1:100-1:300IF 1:200-1:1000ELISA 1:20000
Specificity	PTTG1/2/3 Polyclonal Antibody detects endogenous levels of PTTG1/2/3 protein.
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.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Securin Esp1-associated protein Pituitary tumor-transforming gene 1 protein Tumor-transforming protein 1 hPTTG

Molecular Weight	30 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:9690OMIM:604147
Alternative Names	Securin Esp1-associated protein Pituitary tumor-transforming gene 1 protein Tumor-transforming protein 1 hPTTG
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.
Sequence and Domain Family	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 thioester with the acceptor lysine residue.
Cellular Localization	Cytoplasm. Nucleus.
Post-translational Modifications	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.