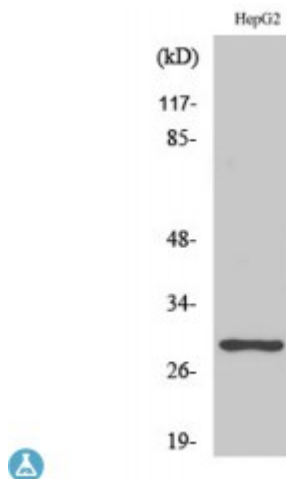


## Anti-PTTG1/2/3 antibody



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

|                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Molecular Weight</b>                 | 30 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Clonality</b>                        | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Conjugation</b>                      | Unconjugated                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Isotype</b>                          | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Formulation</b>                      | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Concentration</b>                    | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Storage Instruction</b>              | Store at -20°C, and avoid repeat freeze-thaw cycles.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Database Links</b>                   | <a href="https://www.ncbi.nlm.nih.gov/ncbiurl/5682262/HGNC:96900OMIM:604147">HGNC:96900OMIM:604147</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Alternative Names</b>                | Securin Esp1-associated protein Pituitary tumor-transforming gene 1 protein<br>Tumor-transforming protein 1 hPTTG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Function</b>                         | 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. |
| <b>Sequence and Domain Family</b>       | 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Cellular Localization</b>            | Cytoplasm. Nucleus.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Post-translational Modifications</b> | 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.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |