G-Biosciences Image not found or type unknown

Immunotag™ PTTG1/2/3 Polyclonal Antibody

Antibody Specification

Catalog No.	ITT3904
Product Description	Immunotag™ PTTG1/2/3 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	PTTG1/2/3
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,IF,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human
Host Species	Rabbit
Immunogen	The antiserum was produced against synthesized peptide derived from human PTTG1. AA range:111-160
Specificity	PTTG1/2/3 Polyclonal Antibody detects endogenous levels of PTTG1/2/3 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	PTTG1
Accession No.	O95997 Q9CQJ7
Alternate Names	PTTG1; EAP1; PTTG; TUTR1; Securin; Esp1-associated protein; Pituitary tumor-transforming gene 1 protein; Tumor-transforming protein 1; hPTTG

Antibody Specification

Description	pituitary tumor-transforming 1(PTTG1) Homo sapiens 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 fo
Cell Pathway/ Category	Cell_Cycle_G1S,Cell_Cycle_G2M_DNA,Oocyte meiosis,
Protein Expression	Brain,Epithelium,Fetal liver,PCR rescued clones,Pituitary adenoma,Small int
Subcellular Localization	nucleus,cytoplasm,cytosol,
Protein Function	developmental stage:Low level during G1 and S phases. Peaks at M phase. During anaphase, it is degraded.,disease:Has strong transforming capabilities on a variety of cell lines including NIH 3T3 fibroblasts and on athymic nude mice. Overexpressed in many patients suffering from pituitary adenomas, primary epithelial neoplasias, and esophageal cancer. No mutation in the coding sequence has been observed. The transforming capability may be due to its interaction and regulation of TP53 pathway.,domain:The N-terminal destruction box (D-box) acts as a recognition signal for degradation via the ubiquitin-proteasome pathway.,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.,PTM:Phosphorylated at Ser-165 by CDC2 during mitosis.,PTM:Phosphorylated in vitro by ds-DNA kinase.,PTM:Ubiquitinated by the anaphase promoting complex (APC) at the onset of anaphase, conducting to its degradation.,similarity:Belongs to the securin family.,subunit:Interacts with RPS10 and DNAJA1 (By similarity). Interacts with the caspase-like ESPL1, and prevents its protease activity probably by covering its active site. Interacts with TP53 and blocks its activity probably by blocking its binding to DNA. Interacts with the Ku 70 kDa subunit of ds-DNA kinase. Interacts with PTTG1IP.,tissue specificity:Expressed at low level in most tissues, except in adult testis, where it is highly expressed.,tissue specificity:Expressed at low levels in the pituitary, liver, spleen, prostate, testis, ovary, small intestine and colon. Also expressed in various pituitary, testicular, liver and ovarian tumors.,
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