



PTTG1/2/3 Monoclonal Antibody

Catalog No	YP-mAb-00502
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB
Gene Name	PTTG1
Protein Name	Securin
Immunogen	The antiserum was produced against synthesized peptide derived from human PTTG1. AA range:111-160
Specificity	PTTG1/2/3 Monoclonal Antibody detects endogenous levels of PTTG1/2/3 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	PTTG1; EAP1; PTTG; TUTR1; Securin; Esp1-associated protein; Pituitary tumor-transforming gene 1 protein; Tumor-transforming protein 1; hPTTG
Observed Band	30kD
Cell Pathway	Cytoplasm. Nucleus.
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.
Function	developmental stage:Low level during G1 and S phases. Peaks at M phase. During anaphase, it is degraded.,disease:Has strong transforming caMABilities 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 caMABility 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 c



Background

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.

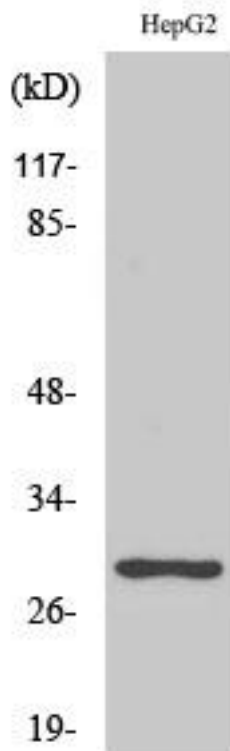
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using PTTG1/2/3 Monoclonal Antibody