

Product Name: KD-Validated PTTG1 Recombinant Rabbit Monoclonal Antibody**Catalog #: KVA00917**

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,M
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 22.0kDa

Antigen Information

Gene Name	PTTG1
Alternative Names	PTTG1 Regulator Of Sister Chromatid Separation, Securin; Securin; HPTTG; PTTG; EAP1; Tumor-Transforming Protein; ECRAR; TUTR1; Endogenous Cardiac Regeneration-Associated Regulator; Pituitary Tumor-Transforming Gene 1 Protein; Pituitary Tumor-Transforming 1; ESP1-Associated Protein 1; Esp1-Associated Protein
Gene ID	9232.0
SwissProt ID	O95997
Immunogen	A synthesized peptide derived from human Securin

Background

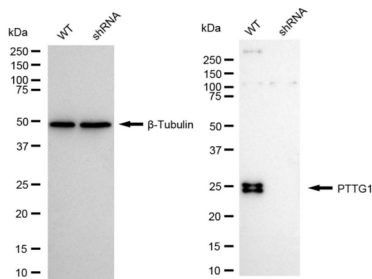
The encoded protein is a homolog of yeast securin proteins, which prevent separins from promoting sister chromatid

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 for this gene. [provided by RefSeq, Sep 2013]

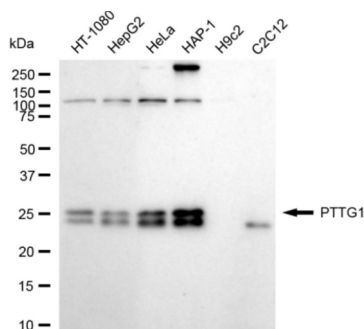
Research Area

Cell Biology, Epigenetics and Nuclear Signaling, Cancer

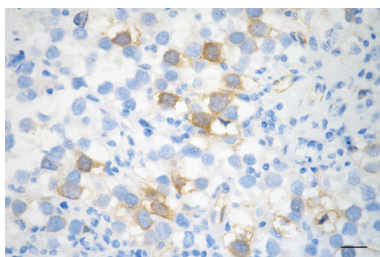
Image Data



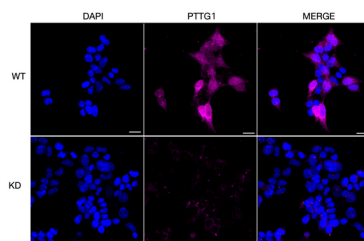
Western blotting analysis using PTTG1 antibody (KVA00917). PTTG1 expression in wild type (WT) and PTTG1 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with PTTG1 antibody (KVA00917, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



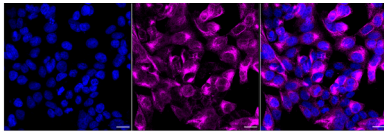
Western blotting analysis using PTTG1 antibody (KVA00917). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PTTG1 antibody (KVA00917, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



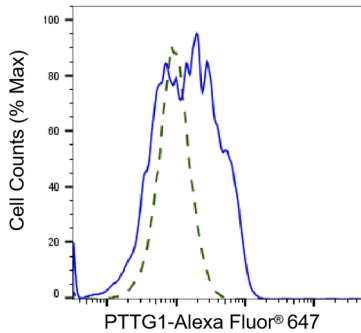
Immunohistochemistry was performed on paraffin-embedded human seminoma using PTTG1 antibody (KVA00917, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40 $\times$ objective). Scale bar: 25 μ m.



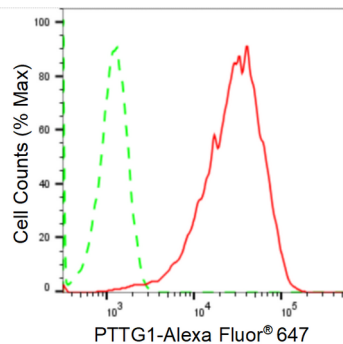
Immunocytochemical staining of HeLa cells using PTTG1 antibody (KVA00917, 1:1,000). Top panel: wild-type (WT); Bottom panel: PTTG1 shRNA knockdown (KD). Nuclei were stained blue with DAPI; PTTG1 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μ m.



Immunocytochemical staining of HAP-1 cells with PTTG1 antibody (KVA00917, 1:1,000). Nuclei were stained blue with DAPI; PTTG1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 μ m.



Validation of PTTG1 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with PTTG1 antibody (KVA00917, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of PTTG1 expression in HAP-1 cells using PTTG1 antibody (KVA00917, 1:2,000). Green, isotype control; red, PTTG1.