

CPTC-GSTP1-1 (CAB080328)

Uniprot ID: P09211

Protein name: GSTP1_HUMAN

Full name: Glutathione S-transferase P

Function: Conjugation of reduced glutathione to a wide number of exogenous and endogenous hydrophobic electrophiles. Involved in the formation of glutathione conjugates of both prostaglandin A2 (PGA2) and prostaglandin J2 (PGJ2) (PubMed:9084911). Participates in the formation of novel hepxilin regioisomers (PubMed:21046276). Regulates negatively CDK5 activity via p25/p35 translocation to prevent neurodegeneration.

Subcellular location:

Cytoplasm (*experimental evidence*)

Mitochondrion (*experimental evidence*)

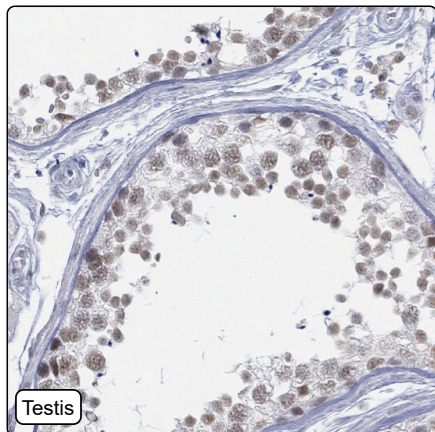
Nucleus (*experimental evidence*)

NOTE: The 83 N-terminal amino acids function as an uncleaved transit peptide, and arginine residues within it are crucial for mitochondrial localization.

Protein existence: Experimental evidence at protein level

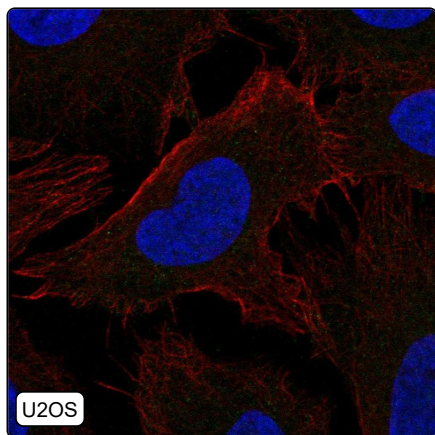
Comment:

Immunohistochemistry



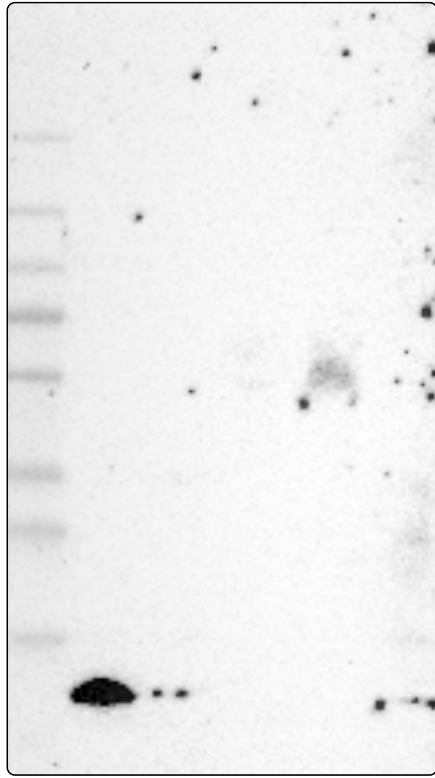
IHC protocol:	HIER pH6, Dilution 1:270
IHC test staining:	Nuclear positivity in testis.
Literature conformance:	Not consistent with gene/protein characterization data
Literature significance:	
RNA similarity:	Very low consistency between antibody staining and RNA expression data
RNA tissue specificity:	Tissue enhanced (esophagus)
RNA tissue distribution:	Detected in all
IHC Sibling similarity:	Other antibody shows dissimilar IHC staining pattern

Immunofluorescence



IF Overlay:	antibody (green), anti-tubulin (red) and DAPI (blue)
IF main location:	
IF additional location:	
IF approved for publication on HPA:	No
IF in THP-1:	Negative
IF in U2OS:	Negative

Western blot



WB Size markers (kDa):	250, 130, 100, 70, 55, 35, 25, 15, 10
WB Lanes:	Marker (1), RT-4 (2), U-251MG (3), Plasma (4), Liver (5), Tonsil (6)
WB Target weight (kDa):	7, 19, 23
WB Validation:	Uncertain (Weak band of predicted size but with additional bands of higher intensity also present.)