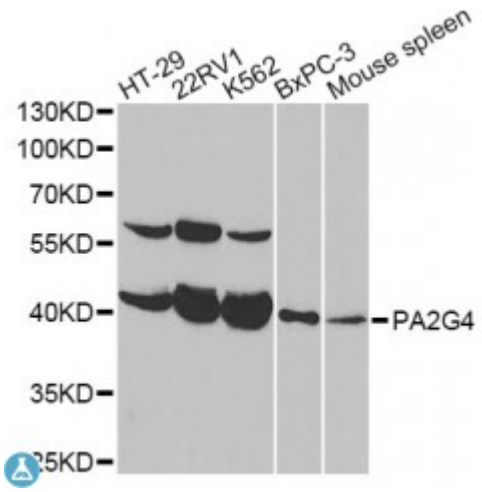
Anti-PA2G4 Antibody



Description	This gene encodes an RNA-binding protein that is involved in growth regulation. This protein is present in pre-ribosomal ribonucleoprotein complexes and may be involved in ribosome assembly and the regulation of intermediate and late steps of rRNA processing. This protein can interact with the cytoplasmic domain of the ErbB3 receptor and may contribute to transducing growth regulatory signals. This protein is also a transcriptional co-repressor of androgen receptor-regulated genes and other cell cycle regulatory genes through its interactions with histone deacetylases. This protein has been implicated in growth inhibition and the induction of differentiation of human cancer cells. Six pseudogenes, located on chromosomes 3, 6, 9, 18, 20 and X, have been identified.

Model	STJ115972
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	IF, WB
Immunogen	Recombinant fusion protein containing a sequence corresponding to amino acids 1-394 of human PA2G4 (NP_006182.2).
Gene ID	5036
Gene Symbol	PA2G4
Dilution range	WB 1:500 - 1:2000 IF 1:50 - 1:200
Tissue Specificity	Isoform 2 is undetectable whereas isoform 1 is strongly expressed in cancer cells (at protein level), Isoform 1 and isoform 2 are widely expressed, including heart, brain, lung, pancreas, skeletal muscle, kidney, placenta and

	liver
Purification	Affinity purification
Note	For Research Use Only (RUO).
Protein Name	Proliferation-associated protein 2G4 Cell cycle protein p38-2G4 homolog hG4-1 ErbB3-binding protein 1
Molecular Weight	43.787 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS with 0.02% sodium azide, 50% glycerol, pH7.3.
Storage Instruction	Store at -20C. Avoid freeze / thaw cycles.
Database Links	HGNC:8550OMIM:602145Reactome:R-HSA-6798695
Alternative Names	Proliferation-associated protein 2G4 Cell cycle protein p38-2G4 homolog hG4-1 ErbB3-binding protein 1
Function	May play a role in a ERBB3-regulated signal transduction pathway, Seems be involved in growth regulation, Acts a corepressor of the androgen receptor (AR) and is regulated by the ERBB3 ligand neuregulin-1/heregulin (HRG), Inhibits transcription of some E2F1-regulated promoters, probably by recruiting histone acetylase (HAT) activity, Binds RNA, Associates with 28S, 18S and 5,8S mature rRNAs, several rRNA precursors and probably U3 small nucleolar RNA, May be involved in regulation of intermediate and late steps of rRNA processing, May be involved in ribosome assembly, Mediates cap-independent translation of specific viral IRESs (internal ribosomal entry site) , Regulates cell proliferation, differentiation, and survival, Isoform 1 suppresses apoptosis whereas isoform 2 promotes cell differentiation ,
Cellular Localization	Cytoplasm
Post-translational Modifications	Phosphorylated on serine and threonine residues, Phosphorylation is enhanced by HRG treatment, Basal phosphorylation is PKC-dependent and HRG-induced phosphorylation is predominantly PKC-independent, Phosphorylation at Ser-361 by PKC/PRKCD regulates its nucleolar localization,