

Rabbit PA2G4 Polyclonal Antibody | anti-PA2G4 antibody

PA2G4 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA327012	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PA2G4; Polyclonal Antibody; PA2G4 Antibody; 38kDa; AA672939; Cell cycle protein p38 2G4 homolog; Cell cycle protein p38-2G4 homolog; ErbB-3 binding protein 1; ErbB3 binding protein 1; ErbB3-binding protein 1; ErbB3-binding protein Ebp1; hG4 1; hG4-1; IRES-specific cellular trans-acting factor 45 kDa; MGC81621; MGC94070; Mpp1; p38 2G4; Pa2g4; PA2G4_HUMAN; Plfap; Proliferation associated 2G4; 38-KD; Proliferation-associated 2G4; a; Proliferation-associated protein 1; Proliferation-associated protein 2G4; Protein p38-2G4; si:dz150i12.2; wu:fb19b11; wu:ft56d05; zgc:86732; anti-PA2G4 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	PA2G4 antibody detects endogenous levels of total PA2G4
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	394
Applicable Applications for anti-PA2G4 antibody	ELISA, ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human PA2G4
Subcellular Location	Cytoplasm. Nucleus > Nucleolus. Translocates to the nucleus upon treatment with HRG.
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.
Predicted Cross Reactivity	Pig, Bovine, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Bovine (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (92%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



IF (Immunofluorescence)

AAA327012 staining HuvEc by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100, then blocked in 10% serum for 45 minutes at 25 degree C. The primary antibody was diluted at 1/200 and incubated with the sample for 1 hour at 37 degree C. An Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of extracts from rat spleen, using PA2G4 Antibody.



WB (Western Blot)

Western blot analysis of Hela whole cell lysates, using PA2G4 Antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)

AAA327012 at 1/100 staining Mouse pancreas tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.

ADDITIONAL INFORMATION

Related Product Information for 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.

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/hereregulin (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) (By similarity). Regulates cell proliferation, differentiation, and survival. Isoform 1 suppresses apoptosis whereas isoform 2 promotes cell differentiation (By similarity).

Subunit Structure: Isoform 2 interacts with the cytoplasmic domain of non-phosphorylated ERBB3; the interaction requires PKC activity. Interacts with AR. Treatment with HRG leads to dissociation from ERBB3 and increases association with AR. Interacts with NCL/nucleolin. Component of a ribonucleoprotein complex containing at least PA2G4, NCL, TOP1, PABPC2, RPLP0, acetylated histone H1 (HIST1H1A or H1F1), histone H1 2/4, RPL4, RPL8, RPL15, RPL18, RPL18A, RPL21, RPL11, RPL12, RPL28, RPL27, RPLP2 and RPL24. Interacts with HDAC2. Interacts with RB1; the interaction is enhanced upon PA2G4 dephosphorylation. Interacts with AKT1 (By similarity). Isoform 1 and isoform 2 interact with RNF20. Isoform 2 interacts with HUWE1. Interacts with DNAJC21 (PubMed:27346687).

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. In cancer cells, isoform 2 is polyubiquitinated leading to its proteasomal degradation and phosphorylation by PKC/PRKCD enhances polyubiquitination.

Similarity: Belongs to the peptidase M24 family.

NCBI AND UNIPROT INFORMATION

NCBI GI #	124494254
NCBI GeneID	5036
NCBI Accession #	NP_006182.2

NCBI GenBank Nucleotide #	NM_006191.2
UniProt Accession #	Q9UQ80 ; O43846 ; Q9UM59
Molecular Weight	Observed: 43 kDa Predicted: 44 kDa
NCBI Official Full Name	proliferation-associated protein 2G4
NCBI Official Synonym Full Names	proliferation-associated 2G4
NCBI Official Symbol	PA2G4
NCBI Official Synonym Symbols	EBP1; HG4-1; p38-2G4
NCBI Protein Information	proliferation-associated protein 2G4
UniProt Protein Name	Proliferation-associated protein 2G4
UniProt Gene Name	PA2G4
UniProt Synonym Gene Names	EBP1; hG4-1

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/pa2g4-antibody-immunocytochemistry-immunofluorescence-immunohistochemistry-western-blot-elisa/327012>