

KD-Validated Anti-Proliferation-Associated 2G4 Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1615

Specification

KD-Validated Anti-Proliferation-Associated 2G4 Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC Primary Accession Q9UQ80

Reactivity Rat, Human, Mouse

Clonality Monoclonal Isotype Rabbit IgG

Calculated MW Predicted, 44 kDa , observed , 42 kDa KDa

Gene Name PA2G4

Aliases Proliferation-Associated 2G4; EBP1;

IRES-Specific Cellular Transacting Factor 45; Proliferation-Associated Protein 2G4; Proliferation-Associated 2G4, 38kDa; Proliferation-Associated 2G4, 38kD; Cell Cycle Protein P38-2G4 Homolog; ErbB-3 Receptor Binding Protein; ErbB3-Binding Protein 1; ITAF45; HG4-1; ErbB3-Binding Protein Ebp1; ErbB-3 Binding Protein 1;

P38-2G4

Immunogen A synthesized peptide derived from human

EBP1 / PA2G4

KD-Validated Anti-Proliferation-Associated 2G4 Rabbit Monoclonal Antibody - Additional Information

Gene ID **5036**

Other Names

Proliferation-associated protein 2G4, Cell cycle protein p38-2G4 homolog, hG4-1, ErbB3-binding protein 1, PA2G4, EBP1

KD-Validated Anti-Proliferation-Associated 2G4 Rabbit Monoclonal Antibody - Protein Information

Name PA2G4

Synonyms EBP1

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

Cellular Location

[Isoform 1]: Cytoplasm. Nucleus, nucleolus Note=Translocates to the nucleus upon treatment with HRG Phosphorylation at Ser-361 by PKC/PRKCD regulates its nucleolar localization.

Tissue Location

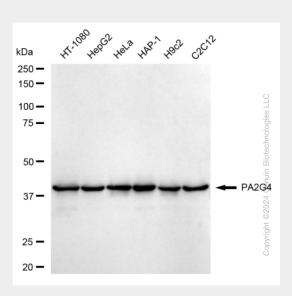
Isoform 2 is undetectable whereas isoform 1 is strongly expressed in cancer cells (at protein level). Isoform 1 and isoform 2 are widely expressed, including heart, brain, lung, pancreas, skeletal muscle, kidney, placenta and liver

KD-Validated Anti-Proliferation-Associated 2G4 Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

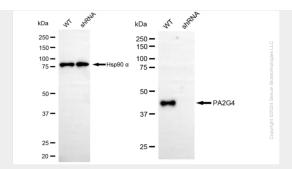
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

KD-Validated Anti-Proliferation-Associated 2G4 Rabbit Monoclonal Antibody - Images

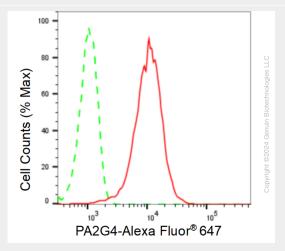


Western blotting analysis using anti-PA2G4 antibody (Cat#AGI1615). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-PA2G4 antibody (Cat#AGI1615, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

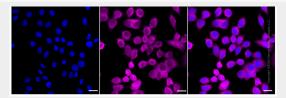




Western blotting analysis using anti-PA2G4 antibody (Cat#AGI1615). PA2G4 expression in wild type (WT) and PA2G4 shRNA knockdown (KD) HeLa cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-PA2G4 antibody (Cat#AGI1615, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of PA2G4 expression in HepG2 cells using PA2G4 antibody (Cat#AGI1615, 1:2,000). Green, isotype control; red, PA2G4.



Immunocytochemical staining of HepG2 cells with anti-PA2G4 antibody (Cat#AGI1615, 1:1,000). Nuclei were stained blue with DAPI; PA2G4 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: $20~\mu m$.