
Product Name: KD-Validated Proliferation-Associated 2G4 Recombinant Rabbit Monoclonal Antibody

Catalog #: KVA00985

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
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: 43.8kDa

Antigen Information

Gene Name	PA2G4 Proliferation-Associated 2G4; EBP1; IRES-Specific Cellular Transacting Factor 45; Proliferation-Associated Protein 2G4; Proliferation-Associated 2G4, 38kDa; Proliferation-
Alternative Names	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
Gene ID	5036.0
SwissProt ID	Q9UQ80
Immunogen	A synthesized peptide derived from human EBP1 / PA2G4

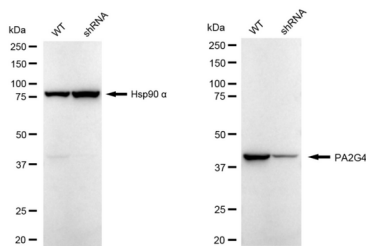
Background

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. [provided by RefSeq, Jul 2008]

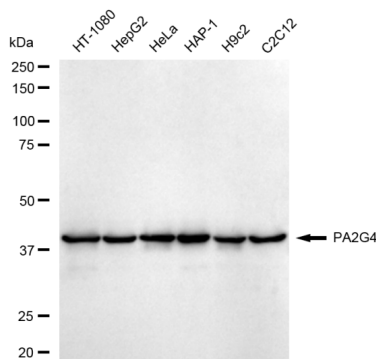
Research Area

Epigenetics and Nuclear Signaling

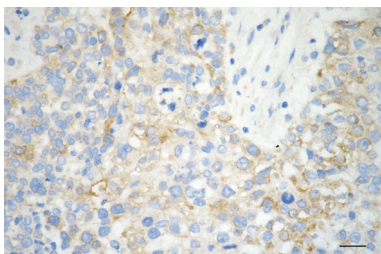
Image Data



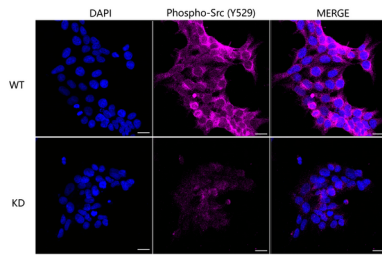
Western blotting analysis using PA2G4 antibody (KVA00985). PA2G4 expression in wild type (WT) and PA2G4 shRNA knockdown (KD) HeLa cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with PA2G4 antibody (KVA00985, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



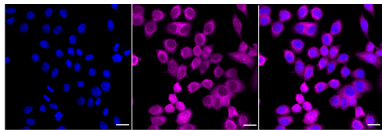
Western blotting analysis using PA2G4 antibody (KVA00985). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with PA2G4 antibody (KVA00985, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



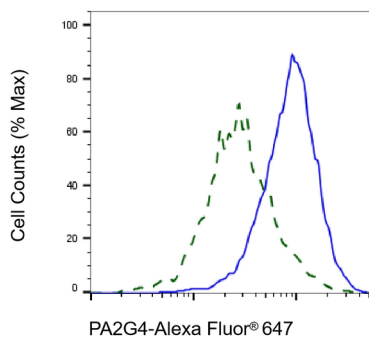
Immunohistochemistry was performed on paraffin-embedded human breast carcinoma using PA2G4 antibody (KVA00985, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



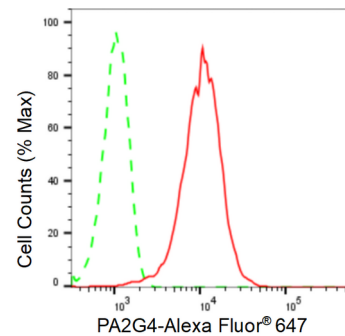
Immunocytochemical staining of HeLa cells using PA2G4 antibody (KVA00985, 1:1,000), Top panel: wild-type (WT); Bottom panel: PA2G4 shRNA knockdown (KD). Nuclei were stained blue with DAPI; PA2G4 was stained magenta with Alexa Fluor® 647. Scale bar, 20 μm.



Immunocytochemical staining of HepG2 cells with PA2G4 antibody (KVA00985, 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 μm.



Validation of PA2G4 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with PA2G4 antibody (KVA00985, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of PA2G4 expression in HepG2 cells using PA2G4 antibody (KVA00985, 1:2,000). Green, isotype control; red, PA2G4.