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PA2G4 Antibody (Center P205) Blocking Peptide

Synthetic peptide
Catalog # BP2848c

Specification

PA2G4 Antibody (Center P205) Blocking Peptide - Product Information

Primary Accession Q9UQ80

PA2G4 Antibody (Center P205) Blocking Peptide - 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

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP2848c was selected from the Center region of human PA2G4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

PA2G4 Antibody (Center P205) Blocking Peptide - 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

PA2G4 Antibody (Center P205) Blocking Peptide - Protocols

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

- Blocking Peptides

PA2G4 Antibody (Center P205) Blocking Peptide - Images

PA2G4 Antibody (Center P205) Blocking Peptide - Background

PA2G4 is 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.

PA2G4 Antibody (Center P205) Blocking Peptide - References

Zhang,Y., Mol. Cancer Ther. 7 (10), 3176-3186 (2008)Zhang,Y., Cancer Lett. 265 (2), 298-306 (2008)Okada,M., J. Biol. Chem. 282 (50), 36744-36754 (2007)