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RAI3 Antibody (C-term) Blocking Peptide

Synthetic peptide
Catalog # BP6239a

Specification

RAI3 Antibody (C-term) Blocking Peptide - Product Information

Primary Accession	Q8NFJ5
Other Accession	NP_003970

RAI3 Antibody (C-term) Blocking Peptide - Additional Information

Gene ID 9052

Other Names
Retinoic acid-induced protein 3, G-protein coupled receptor family C group 5 member A, Orphan G-protein-coupling receptor PEIG-1, Retinoic acid-induced gene 1 protein, RAIG-1, GPRC5A, GPCR5A, RAI3, RAIG1

Target/Specificity
The synthetic peptide sequence used to generate the antibody AP6239a was selected from the C-term region of human RAI3 . 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.

RAI3 Antibody (C-term) Blocking Peptide - Protein Information

Name GPRC5A

Synonyms GPCR5A, RAI3, RAIG1

Function
Orphan receptor. Could be involved in modulating differentiation and maintaining homeostasis of epithelial cells. This retinoic acid-inducible GPCR provide evidence for a possible interaction between retinoid and G-protein signaling pathways. Functions as a negative modulator of EGFR signaling (By similarity). May act as a lung tumor suppressor (PubMed:18000218).

Cellular Location

Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Note=Localized in perinuclear vesicles, probably Golgi- associated vesicles.

Tissue Location
Expressed at high level in fetal and adult lung tissues but repressed in most human lung cancers (PubMed:9857033, PubMed:18000218). Constitutively expressed in fetal kidney and adult placenta, kidney, prostate, testis, ovary, small intestine, colon, stomach, and spinal cord at low to moderate levels. Not detectable in fetal heart, brain, and liver and adult heart, brain, liver, skeletal muscle, pancreas, spleen, thymus, and peripheral leukocytes. According to PubMed:10783259, expressed at low but detectable level in pancreas and heart.

RAI3 Antibody (C-term) Blocking Peptide - Protocols

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

- Blocking Peptides

RAI3 Antibody (C-term) Blocking Peptide - Images

RAI3 Antibody (C-term) Blocking Peptide - Background

Retinoic acid plays a critical role in development, cellular growth, and differentiation. The specific function for the protein from this retinoic acid-induced gene has not yet been determined; however, it may play a role in embryonic development and epithelial cell differentiation. Rai3 is a member of the type 3 G protein-coupling receptor family, characterized by the signature 7-transmembrane domain motif. It may also be involved in interaction between retinoid acid and G protein signalling pathways.

RAI3 Antibody (C-term) Blocking Peptide - References

Robbins, M.J., et al., Genomics 67(1):8-18 (2000).Cheng, Y., et al., J. Biol. Chem. 273(52):35008-35015 (1998).Cafferata, E.G., et al., Cell. Mol. Biol. (Noisy-le-grand) 42(5):797-804 (1996).