

GPRC5A / RAI3 Antibody (Extracellular Domain) Rabbit Polyclonal Antibody Catalog # ALS10302

Specification

GPRC5A / RAI3 Antibody (Extracellular Domain) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution IHC-P, ICC <u>O8NFJ5</u> Human Rabbit Polyclonal 40kDa KDa IHC-P~~N/A ICC~~N/A

GPRC5A / RAI3 Antibody (Extracellular Domain) - 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 Human GPRC5A / RAI3. BLAST analysis of the peptide immunogen showed no homology with other human proteins.

Reconstitution & Storage Long term: -70°C; Short term: +4°C

Precautions GPRC5A / RAI3 Antibody (Extracellular Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

GPRC5A / **RAI3** Antibody (Extracellular Domain) - 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:18000218, PubMed:9857033). 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.

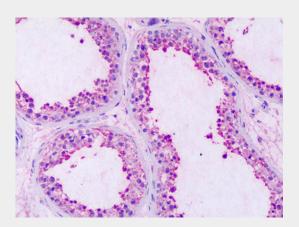
Volume 50 μl

GPRC5A / RAI3 Antibody (Extracellular Domain) - Protocols

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

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

GPRC5A / RAI3 Antibody (Extracellular Domain) - Images



Anti-GPRC5A / RAI3 antibody IHC of human testis.

GPRC5A / RAI3 Antibody (Extracellular Domain) - Background

Unknown. This G-protein coupled receptor could be involved in modulating differentiation and maintaining homeostasis of epithelial cells. The comparable expression level in fetal lung and kidney with adult tissues suggests a possible role in embryonic development and maturation of these organs. This retinoic acid-inducible GPCR provide evidence for a possible interaction between retinoid and G-protein signaling pathways.

GPRC5A / RAI3 Antibody (Extracellular Domain) - References

Cheng Y., et al.J. Biol. Chem. 273:35008-35015(1998). Cafferata E.G., et al.Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases. Ota T., et al.Nat. Genet. 36:40-45(2004). Mural R.J., et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases. Braeuner-Osborne H., et al.Genomics 65:121-128(2000).