

#### GPRC5A / RAI3 Antibody (Cytoplasmic Domain) Rabbit Polyclonal Antibody Catalog # ALS10303

### Specification

# **GPRC5A / RAI3 Antibody (Cytoplasmic Domain) - Product Information**

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

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

### GPRC5A / RAI3 Antibody (Cytoplasmic 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:<a href="http://www.uniprot.org/citations/18000218" target="\_blank">18000218</a>).

**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.

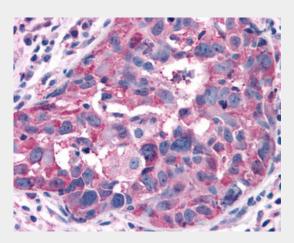
Volume 50 μl

### **GPRC5A / RAI3 Antibody (Cytoplasmic 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 (Cytoplasmic Domain) - Images



Anti-GPRC5A / RAI3 antibody IHC of human Breast, Carcinoma.

# GPRC5A / RAI3 Antibody (Cytoplasmic 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 (Cytoplasmic 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).