

## **RAI3 Polyclonal Antibody**

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54555

## **Specification**

## **RAI3 Polyclonal Antibody - Product Information**

Application IHC-P, IHC-F, IF, ICC, E

Primary Accession

Host

Clonality

Calculated MW

Physical State

Q8NFJ5

Rabbit

Polyclonal

40 KDa

Liquid

Immunogen KLH conjugated synthetic peptide derived

from human RAI3

Epitope Specificity 1-33/357

Isotype IgG

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

Proclin300 and 50% Glycerol.

SUBCELLULAR LOCATION Cell membrane. Cytoplasmic vesicle

membrane. Localized in the plasma membrane and perinuclear vesicles.

SIMILARITY Belongs to the G-protein coupled receptor

3 family.

Important Note This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

### **Background Descriptions**

affinity purified by Protein A

RAI3 is an transmembrane G-protein-coupled receptor that affects many essential biological processes including embryogenesis, cell growth, differentiation, and apoptosis. RAI3 may also be involved in maintaining homeostasis of epithelial cells. Retinoic acid receptors directly regulate RAI3 during its transcription in embryonal carcinoma differentiation. RAI3 expression is upregulated in most tumor cell lines that express mutant p53, suggesting that p53 interacts with the promoter of RAI3 and represses its expression at the beginning of apoptosis. RAI3 is a potential molecular target for diagnosing breast cancer, and selective suppression of signals from RAI3 may have a place in breast cancer treatments.

### **RAI3 Polyclonal Antibody - Additional Information**

### **Gene ID 9052**

## **Other Names**

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

# Target/Specificity



Expressed at high level in fetal and adult lung tissues. Constitutively expressed in fetal kidney and adult placenta, kidney, prostate, testis, ovary, small intestine, colon, stomach, and spinal chord 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.

#### Dilution

<span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class
="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class
="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class ="dilution\_E">E~~N/A</span>

### Storage

Store at -20  $^{\circ}$ C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4  $^{\circ}$ C.

## **RAI3 Polyclonal Antibody - 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.

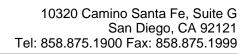
### **Tissue Location**

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.

## **RAI3 Polyclonal Antibody - Protocols**

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

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





**RAI3 Polyclonal Antibody - Images**