RAI3 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54555

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q8NFJ5
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	40251
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human RAI3
Epitope Specificity	1-33/357
Isotype	IgG
Purity	affinity purified by Protein A
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	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.

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	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °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 °C.

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.