

GPRC5B Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54708

Specification

GPRC5B Polyclonal Antibody - Product Information

Application
Primary Accession
Reactivity
Host
Clonality
Calculated MW
Physical State
Immunogen

Epitope Specificity Isotype **Purity** affinity purified by Protein A

Buffer

SUBCELLULAR LOCATION

SIMILARITY

Important Note

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

Q9NZH0

Rat, Pig, Dog, Bovine

Rabbit Polyclonal 42 KDa Liquid

KLH conjugated synthetic peptide derived from human G protein coupled receptor

family C group 1 member B

1-100/403

IaG

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

Proclin300 and 50% Glycerol.

Cell membrane. Cytoplasmic vesicle membrane. Localized in the plasma membrane and perinuclear vesicles.

Belongs to the G-protein coupled receptor

3 family.

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Background Descriptions

GPRC5B (G protein-coupled receptor family C group 5 member B, retinoic acid-induced gene 2 protein) is a 403 amino acid protein encoded by the human GPRC5B gene. GPRC5B is an orphan receptor member of the G protein-coupled receptor 3 family. G protein-coupled receptors (GPCRs or GPRs) contain 7 transmembrane domains and transduce extracellular signals through heterotrimeric G proteins. Key roles for G protein-coupled receptors include control of protein maturation and cell surface delivery, and providing the correct framework for interactions with both heterotrimeric G proteins and arrestins to allow signal generation and termination. This retinoic acid-inducible G protein-coupled receptor provides evidence for a possible interaction between retinoid and G protein signaling pathways. GPRC5B is highly expressed in kidney, pancreas and testis, and has moderate expression in brain, heart, prostate, small intestine and spleen.

GPRC5B Polyclonal Antibody - Additional Information

Gene ID 51704

Other Names



G-protein coupled receptor family C group 5 member B, A-69G12.1, Retinoic acid-induced gene 2

Target/Specificity

protein, RAIG-2, GPRC5B, RAIG2

Expression is high in kidney, pancreas, and testis, medium in brain, heart, prostate, small intestine, and spleen, low in liver, placenta, skeletal muscle, colon, ovary, and thymus, and not detectable in lung and peripheral leukocyte. According to PubMed:10945465, highly expressed in most brain areas examined, with the highest levels observed in corpus callosum, caudate nucleus, putamen, substantia nigra, thalamus, hippocampus, and spinal chord as well as in dorsal root ganglia (DRG). In the periphery, expression levels are relatively low, compared to the CNS, with the strongest expression detected in pancreas, testis, uterus, and stomach.

Dilution

IHC-P~~N/A<br \> <span class
="dilution_IHC-F">IHC-F~~N/A<br \> <span class
="dilution_IF">IF~~1:50~200<br \> ICC~~N/A<br \> E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

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.

GPRC5B Polyclonal Antibody - Protein Information

Name GPRC5B

Synonyms RAIG2

Function

G-protein coupled receptor involved in the regulation of cell volume.

Cellular Location

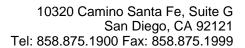
Cell membrane; Multi-pass membrane protein. Cytoplasmic vesicle membrane; Multi-pass membrane protein. Note=Localized in the plasma membrane and perinuclear vesicles

Tissue Location

Expression is high in kidney, pancreas, and testis, medium in brain, heart, prostate, small intestine, and spleen, low in liver, placenta, skeletal muscle, colon, ovary, and thymus, and not detectable in lung and peripheral leukocyte. According to PubMed:10945465, highly expressed in most brain areas examined, with the highest levels observed in corpus callosum, caudate nucleus, putamen, substantia nigra, thalamus, hippocampus, and spinal cord as well as in dorsal root ganglia (DRG). Expressed in glia limitans, ependymal cells, astrocyte cell bodies, the perivascular region in astrocyte endfeet, but not in neurons (PubMed:37143309). In the periphery, expression levels are relatively low, compared to the CNS, with the strongest expression detected in pancreas, testis, uterus, and stomach.

GPRC5B Polyclonal Antibody - Protocols

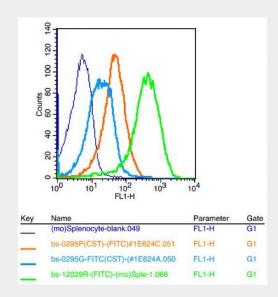
Provided below are standard protocols that you may find useful for product applications.





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

GPRC5B Polyclonal Antibody - Images



Positive control: (mo)Splenocytes(2% Paraformaldehyde-fixed) Isotype Control Antibody: Rabbit IgG; Dilution: 1 μ g in 100 μ l 1 X PBS containing 0.5% BSA Secondary Antibody: Goat anti-rabbit IgG-FITC; Dilution: 1:200 in 1 X PBS containing 0.5% BSA Primary Antibody: rabbit Anti-GPRC5B (bs-12029R); Dilution: 1 μ g in 100 μ l 1X PBS containing 0.5% BSA