

GPR161 Antibody (Cytoplasmic Domain)

Rabbit Polyclonal Antibody Catalog # ALS10090

Specification

GPR161 Antibody (Cytoplasmic Domain) - Product Information

Application IHC
Primary Accession Q8N6U8

Reactivity Human, Hamster, Monkey

Host Rabbit
Clonality Polyclonal
Calculated MW 59kDa KDa

GPR161 Antibody (Cytoplasmic Domain) - Additional Information

Gene ID 23432

Other Names

G-protein coupled receptor 161, G-protein coupled receptor RE2, GPR161

Target/Specificity

Human GPR161. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except MAGEA10 (63%).

Reconstitution & Storage

Long term: -70°C; Short term: +4°C

Precautions

GPR161 Antibody (Cytoplasmic Domain) is for research use only and not for use in diagnostic or therapeutic procedures.

GPR161 Antibody (Cytoplasmic Domain) - Protein Information

Name GPR161

Function

Key negative regulator of Shh signaling, which promotes the processing of GLI3 into GLI3R during neural tube development. Recruited by TULP3 and the IFT-A complex to primary cilia and acts as a regulator of the PKA-dependent basal repression machinery in Shh signaling by increasing cAMP levels, leading to promote the PKA-dependent processing of GLI3 into GLI3R and repress the Shh signaling. In presence of SHH, it is removed from primary cilia and is internalized into recycling endosomes, preventing its activity and allowing activation of the Shh signaling. Its ligand is unknown (By similarity).

Cellular Location

Cell projection, cilium membrane; Multi-pass membrane protein. Cell membrane; Multi-pass membrane protein. Note=Mainly localizes to primary cilium in a TULP3 and IFT-A complex-dependent manner. In presence of SHH, it is removed from primary cilia and is



internalized into recycling endosomes and is apparently not degraded (By similarity).

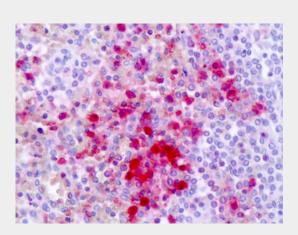
Volume 50 μl

GPR161 Antibody (Cytoplasmic Domain) - Protocols

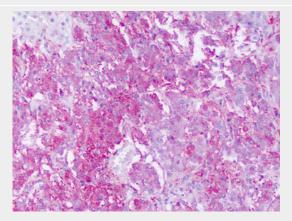
Provided below are standard protocols that you may find useful for product applications.

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

GPR161 Antibody (Cytoplasmic Domain) - Images



Anti-GPR161 antibody IHC of human spleen.



Anti-GPR161 antibody IHC of human adrenal.

GPR161 Antibody (Cytoplasmic Domain) - Background

Key negative regulator of Shh signaling, which promotes the processing of GLI3 into GLI3R during neural tube development. Recruited by TULP3 and the IFT-A complex to primary cilia and acts as a regulator of the PKA-dependent basal repression machinery in Shh signaling by increasing cAMP





levels, leading to promote the PKA-dependent processing of GLI3 into GLI3R and repress the Shh signaling. In presence of SHH, it is removed from primary cilia and is internalized into recycling endosomes, preventing its activity and allowing activation of the Shh signaling. Its ligand is unknown (By similarity).

GPR161 Antibody (Cytoplasmic Domain) - References

Warren C.N.,et al.Submitted (APR-2003) to the EMBL/GenBank/DDBJ databases. Raming K.,et al.Recept. Channels 6:141-151(1998). Ota T.,et al.Nat. Genet. 36:40-45(2004). Gregory S.G.,et al.Nature 441:315-321(2006).