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GPRC6A Antibody (N-Terminus)

Rabbit Polyclonal Antibody
Catalog # ALS10555

Specification

GPRC6A Antibody (N-Terminus) - Product Information

Application	**IHC**
Primary Accession	Q5T6X5
Reactivity	**Human, Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**105kDa KDa**

GPRC6A Antibody (N-Terminus) - Additional Information

Gene ID 222545

Other Names
G-protein coupled receptor family C group 6 member A, hGPRC6A, G-protein coupled receptor GPCR33, hGPCR33, GPRC6A

Target/Specificity
Human GPRC6A. BLAST analysis of the peptide immunogen showed no homology with other human proteins, except NBPF3 (59%).

Reconstitution & Storage
Long term: -70°C; Short term: +4°C

Precautions
GPRC6A Antibody (N-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

GPRC6A Antibody (N-Terminus) - Protein Information

Name GPRC6A

Function
Receptor activated by multiple ligands, including osteocalcin (BGLAP), basic amino acids, and various cations (PubMed:15576628). Activated by amino acids with a preference for basic amino acids such as L-Lys, L-Arg and L-ornithine but also by small and polar amino acids (PubMed:15576628). The L-alpha amino acids respond is augmented by divalent cations Ca(2+) and Mg(2+) (By similarity). Seems to act through a G(q)/G(11) and G(i)-coupled pathway (By similarity). Regulates testosterone production by acting as a ligand for uncarboxylated osteocalcin hormone: osteocalcin-binding at the surface of Leydig cells initiates a signaling response that promotes the expression of enzymes required for testosterone synthesis in a CREB- dependent manner (By similarity). Mediates the non-genomic effects of androgens in multiple tissue (By similarity). May coordinate nutritional and

hormonal anabolic signals through the sensing of extracellular amino acids, osteocalcin, divalent ions and its responsiveness to anabolic steroids (PubMed:20947496).

Cellular Location
Cell membrane {ECO:0000250|UniProtKB:Q8K4Z6}; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q8K4Z6}

Tissue Location
Isoform 1 is expressed at high level in brain, skeletal muscle, testis, bone, calvaria, osteoblasts and leukocytes Expressed at intermediate level in liver, heart, kidney and spleen Expressed at low level in lung, pancreas, placenta and ovary. Not detected in thymus, prostate, small intestine, tongue and colon Isoform 1 and isoform 2 are expressed in kidney at the same level Isoform 2 is expressed at lower level than isoform 1 in the other tissues.

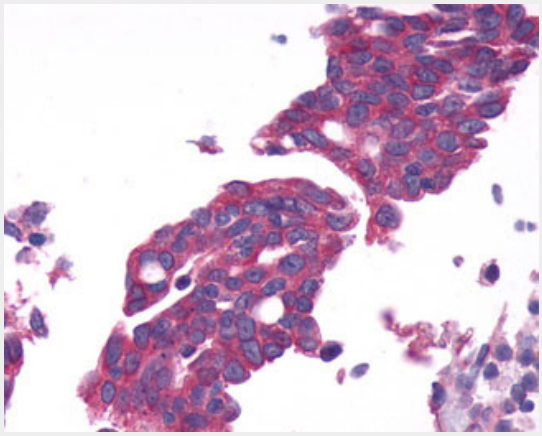
Volume
50 µl

GPRC6A Antibody (N-Terminus) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

GPRC6A Antibody (N-Terminus) - Images



Anti-GPRC6A antibody IHC of human Ovary, Carcinoma.

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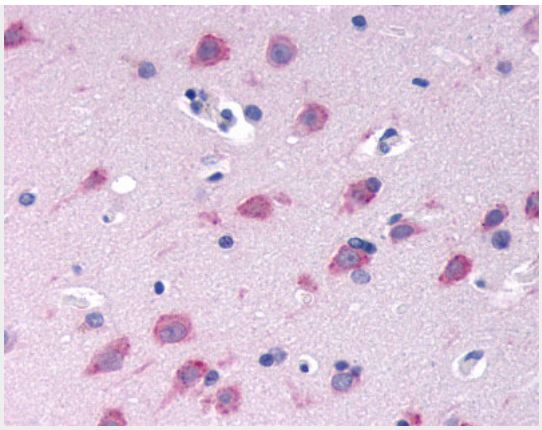

Anti-GPRC6A antibody ALS10555 IHC of human brain, neurons and glia.

GPRC6A Antibody (N-Terminus) - Background

Receptor activated by amino acids with a preference for basic amino acids such as L-Lys, L-Arg and L-ornithine but also by small and polar amino acids. The L-alpha amino acids respond is augmented by divalent cations Ca(2+) and Mg(2+). Activated by extracellular calcium and osteocalin. Seems to act through a G(q)/G(11) and G(i)-coupled pathway. Mediates the non-genomic effects of androgens in multiple tissue. May coordinates nutritional and hormonal anabolic signals through the sensing of extracellular amino acids, osteocalcin, divalents ions and its responsiveness to anabolic steroids.

GPRC6A Antibody (N-Terminus) - References

Wellendorph P.,et al.Gene 335:37-46(2004).
Lorenz-Depiereux B.,et al.Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
Mungall A.J.,et al.Nature 425:805-811(2003).
Suwa M.,et al.Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases.
Takeda S.,et al.FEBS Lett. 520:97-101(2002).