

GPRC6A Antibody (N-Terminus) Rabbit Polyclonal Antibody Catalog # ALS10557

Specification

GPRC6A Antibody (N-Terminus) - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW Dilution IHC-P <u>Q5T6X5</u> Human, Monkey Rabbit Polyclonal 105kDa KDa IHC-P~~N/A

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.

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). 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.

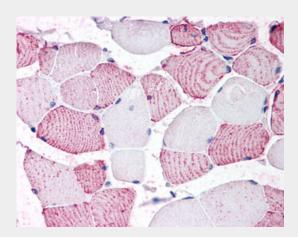
Volume 50 μl

GPRC6A Antibody (N-Terminus) - Protocols

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

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

GPRC6A Antibody (N-Terminus) - Images



Anti-GPRC6A antibody ALS10557 IHC of human skeletal muscle.

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).