

**GPRC6A Antibody (N-Terminus)**  
**Rabbit Polyclonal Antibody**  
**Catalog # ALS10556****Specification**

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**GPRC6A Antibody (N-Terminus) - Product Information**

Application	IHC
Primary Accession	<a href="#">Q5T6X5</a>
Reactivity	Human
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.

**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: <http://www.uniprot.org/citations/15576628> target="\_blank">15576628</a>). 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: <http://www.uniprot.org/citations/15576628> target="\_blank">15576628</a>). The L-alpha amino acids response 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:<a href="http://www.uniprot.org/citations/20947496" target="\_blank">20947496</a>).

#### 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

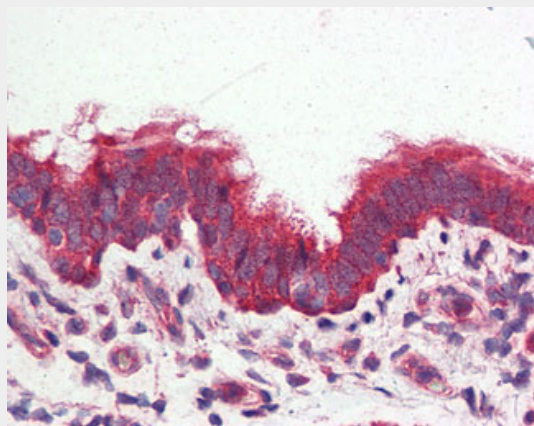
50  $\mu$ l

### GPRC6A Antibody (N-Terminus) - Protocols

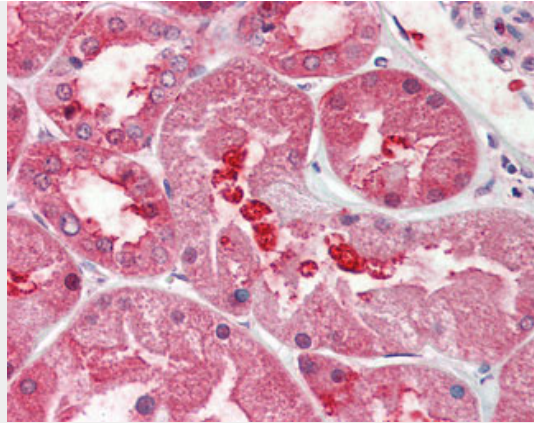
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### GPRC6A Antibody (N-Terminus) - Images



Anti-GPRC6A antibody ALS10556 IHC of human lung, respiratory epithelium.



Anti-GPRC6A antibody ALS10556 IHC of human kidney.

### **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 response is augmented by divalent cations  $\text{Ca}^{2+}$  and  $\text{Mg}^{2+}$ . Activated by extracellular calcium and osteocalcin. 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 coordinate nutritional and hormonal anabolic signals through the sensing of extracellular amino acids, osteocalcin, divalent 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).