

# **GPRC6A Antibody (Center) Blocking Peptide**

Synthetic peptide Catalog # BP18812c

### **Specification**

## **GPRC6A Antibody (Center) Blocking Peptide - Product Information**

Primary Accession

**Q5T6X5** 

## GPRC6A Antibody (Center) Blocking Peptide - 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

#### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## **GPRC6A Antibody (Center) Blocking Peptide - Protein Information**

### Name GPRC6A

#### **Function**

Receptor activated by multiple ligands, including osteocalcin (BGLAP), basic amino acids, and various cations (PubMed:<a href="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:<a href="http://www.uniprot.org/citations/15576628" target="\_blank">15576628</a>). 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:<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.

#### **GPRC6A Antibody (Center) Blocking Peptide - Protocols**

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

## • Blocking Peptides

GPRC6A Antibody (Center) Blocking Peptide - Images

## GPRC6A Antibody (Center) Blocking Peptide - Background

Members of family C of the G protein-coupled receptor(GPCR) superfamily, such as GPRC6A, are characterized by anevolutionarily conserved amino acid-sensing motif linked to anintramembranous 7-transmembrane loop region. Several members of GPCR family C, including GPRC6A, also have a long N-terminal domain(summary by Pi et al., 2005 [PubMed 16199532]).

# **GPRC6A Antibody (Center) Blocking Peptide - References**

Giroux, S., et al. Bone 47(5):975-981(2010)Takata, R., et al. Nat. Genet. 42(9):751-754(2010)Pi, M., et al. J. Bone Miner. Res. 25(5):1092-1102(2010)Dowal, L., et al. J. Biol. Chem. 281(33):23999-24014(2006)Pi, M., et al. J. Biol. Chem. 280(48):40201-40209(2005)