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Anti-GPRC6A Antibody
Rabbit polyclonal antibody to GPRC6A
Catalog # AP61049

Specification

Anti-GPRC6A Antibody - Product Information

Application	**WB, IF/IC**
Primary Accession	Q5T6X5
Other Accession	Q8K4Z6
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Calculated MW	**104753**

Anti-GPRC6A Antibody - Additional Information

Gene ID 222545

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

Target/Specificity
Recognizes endogenous levels of GPRC6A protein.

Dilution
WB~~WB (1/500 - 1/1000), IF/IC (1/100 - 1/500)
IF/IC~~N/A

Format
Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage
Store at -20 °C.Stable for 12 months from date of receipt

Anti-GPRC6A Antibody - 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}

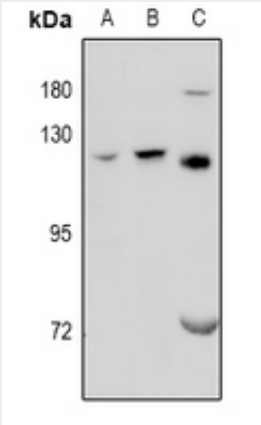
Tissue Location
Isoform 1 is expressed at high level in brain, skeletal muscle, testis, bone, calvaria, osteoblasts and leukocytes Expressed at intermediate level in liver, heart, kidney and spleen Expressed at low level in lung, pancreas, placenta and ovary. Not detected in thymus, prostate, small intestine, 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.

Anti-GPRC6A Antibody - 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

Anti-GPRC6A Antibody - Images



Western blot analysis of GPRC6A expression in HEK293T (A), LO2 (B), rat testis (C) whole cell lysates.

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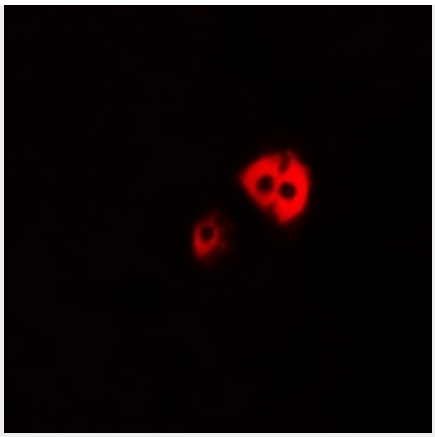

Immunofluorescent analysis of GPRC6A staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with Alexa Fluor 647-conjugated secondary antibody (red) in PBS at room temperature in the dark.

Anti-GPRC6A Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GPRC6A. The exact sequence is proprietary.