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Anti-GPRC6A Antibody

Catalog # AP61049

Product Information

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

Additional Information

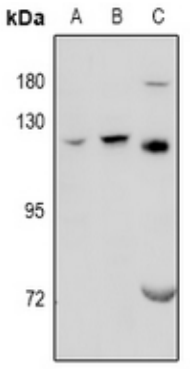
Gene ID	222545
Other Names	G-protein coupled receptor family C group 6 member A; hGPRC6A; G-protein coupled receptor GPCR33; hGPCR33
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human GPRC6A. The exact sequence is proprietary.
Dilution	WB~~WB (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 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

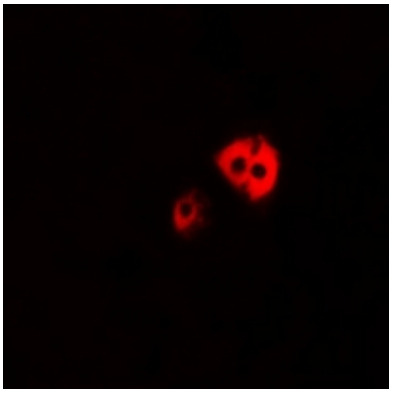
Name	GPRC6A
Function	Receptor activated by multiple ligands, including osteocalcin (BGLAP), basic amino acids, and various cations (PubMed:15576628). Activated by amino acids with a preference for basic amino acids such as L-Lys, L-Arg and L-ornithine but also by small and polar amino acids (PubMed:15576628). 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.

Images



Western blot analysis of GPRC6A expression in HEK293T (A), LO2 (B), rat testis (C) whole cell lysates. (Predicted band size: 104 kD; Observed band size: 120 kD)



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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.