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cGKII Polyclonal Antibody

Catalog # AP69075

Product Information

Application	WB, IHC-P
Primary Accession	Q13237
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	87432

Additional Information

Gene ID	5593
Other Names	PRKG2; PRKGR2; cGMP-dependent protein kinase 2; cGK 2; cGK2; cGMP-dependent protein kinase II; cGKII
Dilution	WB~~Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

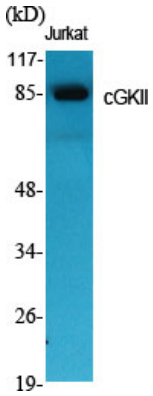
Name	PRKG2
Synonyms	PRKGR2
Function	Crucial regulator of intestinal secretion and bone growth. Phosphorylates and activates CFTR on the plasma membrane. Plays a key role in intestinal secretion by regulating cGMP-dependent translocation of CFTR in jejunum (PubMed:33106379). Acts downstream of NMDAR to activate the plasma membrane accumulation of GRIA1/GLUR1 in synapse and increase synaptic plasticity. Phosphorylates GRIA1/GLUR1 at Ser-863 (By similarity). Acts as a regulator of gene expression and activator of the extracellular signal-regulated kinases MAPK3/ERK1 and MAPK1/ERK2 in mechanically stimulated osteoblasts. Under fluid shear stress, mediates ERK activation and subsequent induction of FOS, FOSL1/FRA1, FOSL2/FRA2 and FOSB that play a key role in the osteoblast anabolic response to mechanical stimulation (By similarity).
Cellular Location	Apical cell membrane; Lipid-anchor

Tissue Location	Highly concentrated in brain, lung and intestinal mucosa

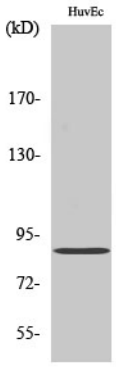
Background

Crucial regulator of intestinal secretion and bone growth (By similarity). Phosphorylates and activates CFTR on the plasma membrane. Plays a key role in intestinal secretion by regulating cGMP-dependent translocation of CFTR in jejunum (By similarity). Acts downstream of NMDAR to activate the plasma membrane accumulation of GRIA1/GLUR1 in synapse and increase synaptic plasticity. Phosphorylates GRIA1/GLUR1 at Ser-863 (By similarity). Acts as regulator of gene expression and activator of the extracellular signal-regulated kinases MAPK3/ERK1 and MAPK1/ERK2 in mechanically stimulated osteoblasts. Under fluid shear stress, mediates ERK activation and subsequent induction of FOS, FOSL1/FRA1, FOSL2/FRA2 and FOSB that play a key role in the osteoblast anabolic response to mechanical stimulation (By similarity).

Images



Western Blot analysis of various cells using cGKII Polyclonal Antibody



Western Blot analysis of HuvEc cells using cGKII Polyclonal Antibody