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cGK 2 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51450

Product Information

Application	WB
Primary Accession	Q13237
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	87432

Additional Information

Gene ID	5593
Other Names	cGMP-dependent protein kinase 2, cGK 2, cGK2, cGMP-dependent protein kinase II, cGKII, PRKG2, PRKGR2
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

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

References

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Fujii M.,et al.FEBS Lett. 375:263-267(1995).
Witczak O.,et al.Biochem. Biophys. Res. Commun. 245:113-119(1998).
Vaandrager A.B.,et al.J. Biol. Chem. 271:7025-7029(1996).
Greenman C.,et al.Nature 446:153-158(2007).

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