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Product datasheet for TA363663

cGKI (PRKG1) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	WB
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	The immunogen is a synthetic peptide directed towards the C terminal region of human PRKG1
Specificity:	**Expected reactivity**: Human
Formulation:	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose. *Note that this product is shipped as lyophilized powder to China customers.*
Concentration:	lot specific
Purification:	Affinity purified
Conjugation:	Unconjugated
Storage:	For short term use, store at 2-8°C up to 1 week. For long term storage, store at -20°C in small aliquots to prevent freeze-thaw cycles.
Stability:	Shelf life: one year from despatch.
Predicted Protein Size:	73 kDa
Gene Name:	protein kinase, cGMP-dependent, type I
Database Link:	NP_001091982.1 Entrez Gene 5592 Human Q13976

View online »

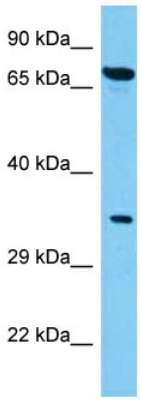
Background: Mammals have three different isoforms of cyclic GMP-dependent protein kinase (Ialpha, Ibeta, and II). These PRKG isoforms act as key mediators of the nitric oxide/cGMP signaling pathway and are important components of many signal transduction processes in diverse cell types. This PRKG1 gene on human chromosome 10 encodes the soluble Ialpha and Ibeta isoforms of PRKG by alternative transcript splicing. A separate gene on human chromosome 4, PRKG2, encodes the membrane-bound PRKG isoform II. The PRKG1 proteins play a central role in regulating cardiovascular and neuronal functions in addition to relaxing smooth muscle tone, preventing platelet aggregation, and modulating cell growth. This gene is most strongly expressed in all types of smooth muscle, platelets, cerebellar Purkinje cells, hippocampal neurons, and the lateral amygdala. Isoforms Ialpha and Ibeta have identical cGMP-binding and catalytic domains but differ in their leucine/isoleucine zipper and autoinhibitory sequences and therefore differ in their dimerization substrates and kinase enzyme activity.

Synonyms: CGKI; cGKI-alpha; cGKI-BETA; DKFZp686K042; FLJ36117; MGC71944; PGK; PKG; PRKG1B; PRKGR1A; PRKGR1B

Protein Families: Druggable Genome, Protein Kinase

Protein Pathways: Gap junction, Long-term depression, Olfactory transduction, Vascular smooth muscle contraction

Product images:



Host: Rabbit
Target Name: PRKG1
Sample Type: Mesenchymoma Tumor Lysate
Antibody Dilution: 1.0µg/ml

Host: Rabbit
Target Name: PRKG1
Sample Tissue: Human Mesenchymoma Tumor lysates
Antibody Dilution: 1ug/ml