

Product datasheet for **TA329008**

Prokr2 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3000
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)DQNGNTSFAPDLN, corresponding to amino acid residues 3-15 of rat Prokineticin Receptor 2. Extracellular, N-terminus.
Formulation:	Lyophilized. Concentration before lyophilization ~0.8mg/ml (lot dependent, please refer to CoA along with shipment for actual concentration). Buffer before lyophilization: Phosphate buffered saline (PBS), pH 7.4, 1% BSA, 0.025% NaN ₃ .
Reconstitution Method:	Add 50 ul double distilled water (DDW) to the lyophilized powder.
Purification:	Affinity purified on immobilized antigen.
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	prokineticin receptor 2
Database Link:	NP_620434 Entrez Gene 192649 Rat Q8R415



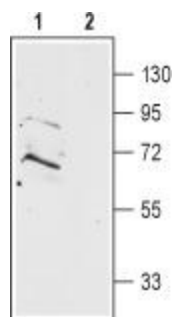
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Background:

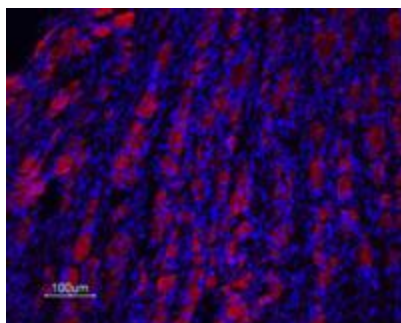
The Prokineticins (PK1 and PK2) are a pair of cysteine-rich secreted peptides with broad physiological functions including gastrointestinal motility, angiogenesis, hematopoiesis and circadian rhythms regulation. The biological effects of the PK1 and PK2 are mediated by two highly homologous receptors termed Prokineticin Receptor 1 (PKR1) and Prokineticin Receptor 2 (PKR2) that belong to the 7-transmembrane domain, G protein-coupled receptor (GPCR) superfamily. Both PK ligands activate the two PK receptors with similar potency. PKR2 receptors couple to Gq/G11 proteins leading to phospholipase C activation, inositol phosphate production and calcium mobilization. The distribution of PKR2 is relatively restricted with high expression levels in the brain, spinal cord and dorsal root ganglions, in organs of the reproductive system and in endocrine tissues such as the thyroid, pituitary and adrenal glands. The PK2 ligand has been shown to be involved in the regulation of circadian rhythms of physiological and behavioral processes in mammals, probably through signaling via PKR2 which is highly expressed in the suprachiasmatic nucleus (SCN), an area of the brain that controls circadian rhythm processes. In addition, loss of function mutations in the PKR2 gene have been associated with Kallmann Syndrome, a condition characterized by idiopathic hypogonadotropic hypogonadism (IHCH) in combination with anosmia, a compromised sense of smell.

Synonyms:

dj680N4.3; GPR73b; GPR73L1; GPRg2; KAL3; PK-R2; PKR2

Product images:

Western blot analysis of rat brain membranes: 1. Anti-Prokineticin Receptor 2 (extracellular) antibody, (1:200). 2. Anti-Prokineticin Receptor 2 (extracellular) antibody, preincubated with the control peptide antigen.



Expression of Prokineticin Receptor 2 in rat DRG. Immunohistochemical staining of rat dorsal root ganglion (DRG) frozen sections using Anti-Prokineticin Receptor 2 (extracellular) antibody, (1:100), followed by goat anti-rabbit-AlexaFluor-594 secondary antibody (red). Staining is present in small, medium and large DRG neurons. Hoechst 33342 is used as the counterstain (blue).