

Product datasheet for **TA329007**

Prokr1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	FC, IHC, WB
Recommended Dilution:	WB: 1:200-1:2000; IHC: 1:100-1:3,000; FC: 1:50-1:600
Reactivity:	Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)ENTTNTFTDFFSARD, corresponding to amino acid residues 10-24 of rat Prokineticin receptor 1. 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 1
Database Link:	NP_620433 Entrez Gene 58182 Mouse Entrez Gene 192648 Rat Q8R416



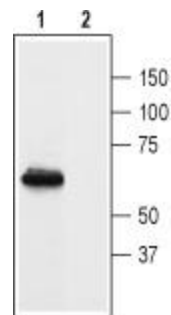
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Background:

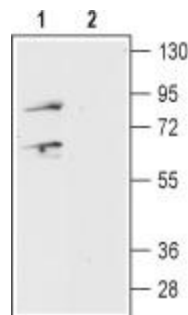
The Prokineticins (PK1 and PK2) are a pair of cysteine-rich secreted peptides with broad physiological functions including gastrointestinal motility, angiogenesis, hematopoiesis and circadian rhythms regulation. The biological effects of the PK1 and PK2 are mediated by two highly homologous receptors 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. PKR1 receptors couple to Gq/G11 proteins leading to phospholipase C activation, inositol phosphate production and calcium mobilization. In addition, activation of the mitogen-activated protein kinase (MAPK) pathways has also been described. PKR1 is broadly distributed throughout peripheral tissues including the intestinal tract, testis, uterus, lung and peripheral blood leukocytes. In addition, the receptor is expressed in the brain particularly in olfactory regions as well as in dorsal root ganglion (DRG) neurons. The physiological function of PKR1 is still being elucidated, however, evidence suggest that the receptor has an important role in pain perception through its ability to stimulate the TRPV1 ion channel in DRG neurons. In addition, a role for PKR1 in the control of the inflammatory response through regulation of macrophage chemotaxis and cytokine production has also been demonstrated.³

Synonyms:

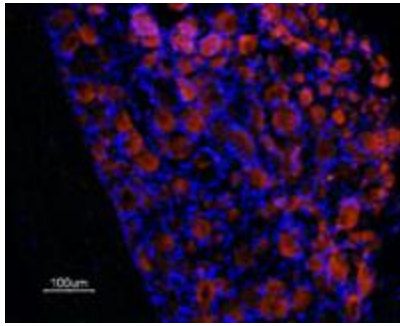
GPR73; GPR73a; OTTHUMP00000159967; PK-R1; PKR1; ZAQ

Product images:

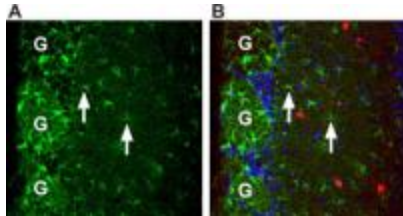
Western blot analysis of rat brain membranes: 1. Anti-Prokineticin Receptor 1 (extracellular) antibody, (1:200). 2. Anti-Prokineticin Receptor 1 (extracellular) antibody, preincubated with the control peptide antigen.



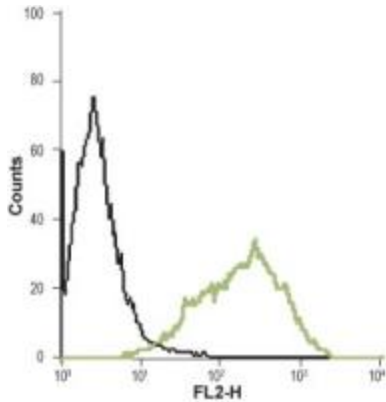
Western blot analysis of mouse brain lysate: 1. Anti-Prokineticin Receptor 1 (extracellular) antibody, (1:200). 2. Anti-Prokineticin Receptor 1 (extracellular) antibody, preincubated with the control peptide antigen.



Expression of Prokineticin Receptor 1 in rat DRG. Immunohistochemical staining of frozen rat dorsal root ganglion (DRG) sections using Anti-Prokineticin Receptor 1 (extracellular) antibody, (1:100), followed by Alexa-555-conjugated goat anti-rabbit secondary antibody. PKR1 (red) is expressed in DRG neurons. Cell nuclei are visualized with Hoechst 33342 (blue).



Expression of Prokineticin Receptor 1 in mouse brain. Immunohistochemical staining of mouse olfactory bulb brain sections using Anti-Prokineticin Receptor 1 (extracellular) antibody, (1:100). A. Green fluorescence reveals intensely stained astrocyte-like cells in the glomeruli (G) and lightly stained astrocyte-like cells in the adjacent layer (arrows). B. Merge of images of PKR1 (green), parvalbumin (red, a neuronal marker) and DAPI (blue) nuclear counterstain.



Indirect Flow cytometry analysis in live intact WEHI-231 (mouse B cell lymphoma) cell lines: black line: Untreated cells + goat-anti-rabbit-Phycoerythrin (PE). green line: Cells + Prokineticin Receptor 1 (extracellular) antibody, (1:20) + goat-anti-rabbit-PE.