

Product datasheet for **TA329010**

Ptger2 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:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Peptide (C)DETSSRKEKWDLR, corresponding to amino acid residues 287-299 of rat prostanoid EP2 receptor . 3rd extracellular loop.
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, 0.05% 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:	prostaglandin E receptor 2 (subtype EP2)
Database Link:	NP_112350 Entrez Gene 5732 Human Entrez Gene 19217 Mouse Entrez Gene 81752 Rat Q62928



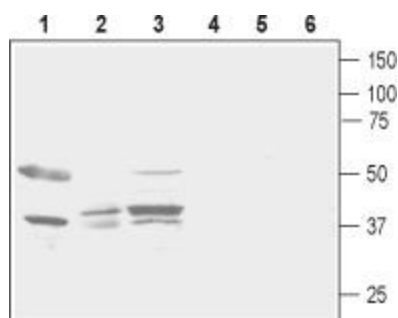
[View online »](#)

Background:

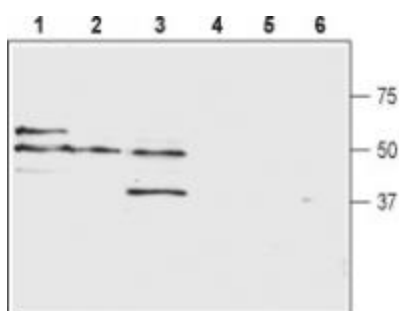
Prostaglandin E2 (PGE2) is involved in a number of physiological and pathophysiological events in many tissues throughout the body. The physiological actions of PGE2 are mediated through its interaction with cell surface prostaglandin E receptors. There are three pharmacologically defined subtypes of the EP receptor, EP1, EP2, and EP3, and these subtypes are suggested to be different in their signal transduction. These receptors belong to the G-protein coupled receptor (GPCR) superfamily. Like all members they have seven transmembrane domains with extracellular N-terminal tail and intracellular C-terminus. The EP2 receptor is expressed in the vasculature, the gastrointestinal tract, kidney and also in the ciliary muscles in the eye. PGE2 is known to play a central role in the pathophysiology of inflammation in synergy with other proinflammatory mediators. PGE2 inhibits the function and the proliferation of T cells and the histamine release from mast cells by increasing the intracellular level of cAMP. EP2 subtype is thought to be in part responsible for vasodilation, oedema formation, hyperanalgesia, modulation of the immune system, and the breakdown of bone and cartilage associated with disorders such as rheumatoid arthritis.

Synonyms:

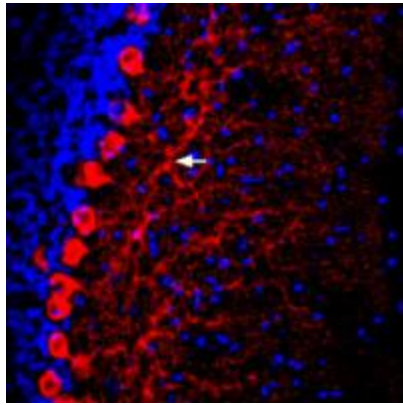
EP2

Product images:

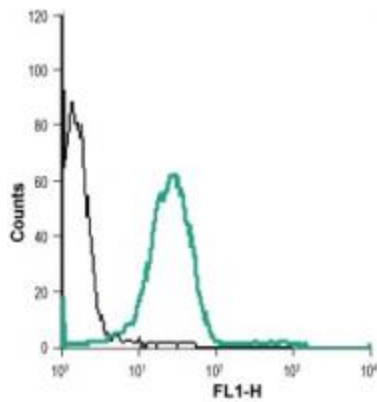
Western blot analysis of rat brain lysate (lanes 1 and 4), rat stomach lysate (lanes 2 and 5) and mouse kidney lysate (lanes 3 and 6): 1-3. Anti-Prostanoid EP2 Receptor (extracellular) antibody, (1:500). 4-6. Anti-Prostanoid EP2 Receptor (extracellular) antibody, preincubated with the control peptide antigen.



Western blot analysis of human THP-1 acute monocytic leukemia cell lysates (lanes 1 and 4), human Jurkat T cell leukemia cell lysates (lanes 2 and 5) and human HT-29 colorectal adenocarcinoma cell lysates (lanes 3 and 6): 1-3. Anti-Prostanoid EP2 Receptor (extracellular) antibody, (1:500). 4-6. Anti-Prostanoid EP2 Receptor (extracellular) antibody, preincubated with the control peptide antigen.



Expression of Prostanoid EP2 Receptor in rat cerebellum. Immunohistochemical staining of perfusion-fixed frozen rat brain sections using Anti-Prostanoid EP2 Receptor (extracellular) antibody, (1:100). Prostanoid EP2 Receptor staining (red) is detected in Purkinje neurons and their dendritic tree (arrow). Blue is DAPI nissl counterstain.



Indirect flow cytometry analysis of live intact human Jurkat T cell leukemia cell line: black line: Unstained cells + goat anti-rabbit-AlexaFluor-488 secondary antibody. green line: Cells + Anti-Prostanoid EP2 Receptor (extracellular) antibody, (1:15) + goat anti-rabbit-AlexaFluor-488 secondary antibody.