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PTGER3 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9132A

Product Information

Application	WB, FC, E
Primary Accession	P43115
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB22525
Calculated MW	43310
Antigen Region	17-46

Additional Information

Gene ID	5733
Other Names	Prostaglandin E2 receptor EP3 subtype, PGE receptor EP3 subtype, PGE2 receptor EP3 subtype, PGE2-R, Prostanoid EP3 receptor, PTGER3
Target/Specificity	This PTGER3 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 17-46 amino acids from the N-terminal region of human PTGER3.
Dilution	WB~~1:1000 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	PTGER3 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PTGER3
Function	Receptor for prostaglandin E2 (PGE2) (PubMed: 7883006, PubMed:7981210, PubMed:8117308, PubMed:8135729, PubMed:8307176). The activity of this receptor can couple to both the inhibition of adenylate cyclase mediated by G(i) proteins, and to an elevation of intracellular calcium (PubMed:7883006,

PubMed:7981210, PubMed:8117308, PubMed:8135729). Required for normal development of fever in response to pyrinogens, including IL1B, prostaglandin E2 and bacterial lipopolysaccharide (LPS). Required for normal potentiation of platelet aggregation by prostaglandin E2, and thus plays a role in the regulation of blood coagulation. Required for increased HCO3(-) secretion in the duodenum in response to mucosal acidification, and thereby contributes to the protection of the mucosa against acid- induced ulceration. Not required for normal kidney function, normal urine volume and osmolality (By similarity).

Cellular Location Cell membrane; Multi-pass membrane protein

Tissue Location Detected in kidney (PubMed:8117308, PubMed:8135729). Expressed in small intestine, heart, pancreas, gastric fundic mucosa, mammary artery and pulmonary vessels

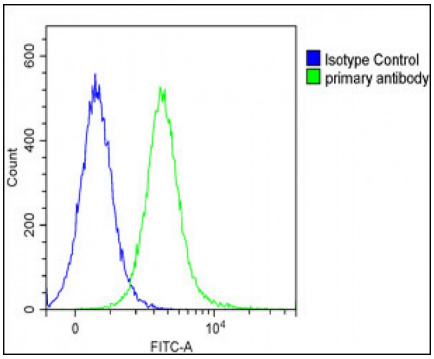
Background

PTGER3 is a member of the G-protein coupled receptor family. This protein is one of four receptors identified for prostaglandin E2 (PGE2). This receptor may have many biological functions, which involve digestion, nervous system, kidney reabsorption, and uterine contraction activities. Studies of the mouse counterpart suggest that this receptor may also mediate adrenocorticotropic hormone response as well as fever generation in response to exogenous and endogenous stimuli.

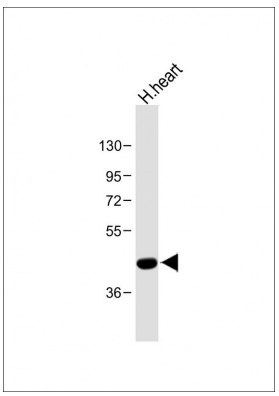
References

Schmid,A., et.al., Eur. J. Biochem. 228 (1), 23-30 (1995)
An,S., et.al., Biochemistry 33 (48), 14496-14502 (1994)

Images



Overlay histogram showing Ramos cells stained with AP9132A(green line). The cells were fixed with 2% paraformaldehyde and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (1:25 dilution) for 60 min at 37ºC. The secondary antibody used was Goat-Anti-Rabbit IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed at 1/200 dilution for 40 min at Room temperature. Isotype control antibody (blue line) was rabbit IgG1 (1µg/1x10^6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.



Anti-PTGER3 Antibody (N-term) at 1:500 dilution + Human heart lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 43 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.