bs-6316R **[Primary Antibody]**

PTGER1 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 5731 **SWISS:** P34995

Target: PTGER1

Immunogen: KLH conjugated synthetic peptide derived from human Prostaglandin E Receptor EP1: 61-160/402.

Purification: affinity purified by Protein A

Concentration: 1mg/ml

Storage: 0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: PTGER1 is a subtype 1 receptor for prostaglandin E2 (PGE2). This receptor is coupled to the phosphatidylinositol-calcium second messenger system by G(q) proteins. PTGER1 may be an important modulator of renal function and is implicated in the smooth muscle contractile response to PGE2 in various tissues.

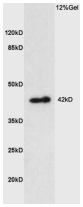
Applications: **WB** (1:500-2000)
IHC-P (1:100-500)
IHC-F (1:100-500)
IF (1:100-500)
Flow-Cyt (1ug/Test)

Reactivity: Mouse, Rat
(predicted: Human, Dog)

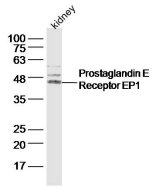
Predicted MW.: 42 kDa

Subcellular Location: Cell membrane

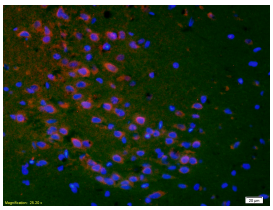
VALIDATION IMAGES



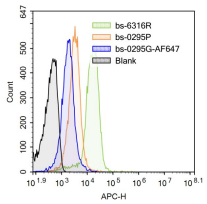
Sample: Brain (Rat) Lysate at 40 ug Primary: Anti-Prostaglandin E Receptor EP1 (bs-6316R) at 1/300 dilution Secondary: HRP conjugated Goat-Anti-rabbit IgG (bs-0295G-HRP) at 1/5000 dilution Predicted band size: 42 kD Observed band size: 42 kD



Sample: Kidney (Mouse) Lysate at 40 ug Primary: Anti-Prostaglandin E Receptor EP1 (bs-6316R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 42 kD Observed band size: 45 kD



Tissue/cell: rat brain tissue;4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-PTGER1 Polyclonal Antibody, Unconjugated(bs-6316R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(bs-0295G-Cy3)used at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Blank control (Black line): Mouse blood (Black). Primary Antibody (green line): Rabbit Anti-Prostaglandin E Receptor EP1 antibody (bs-6316R) Dilution: 3µg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG . Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647 Dilution: 1µg /test. Protocol The cells were fixed with 4% PFA (10min at room

temperature)and then were incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.

SELECTED CITATIONS

- **[IF=25]** Liu Yingjun. et al. NG2 glia protect against prion neurotoxicity by inhibiting microglia-to-neuron prostaglandin E2 signaling. NAT NEUROSCI. 2024 May;:1-11 IF ;Mouse. 38802591
- **[IF=4.872]** Wu F et al. Manganese exposure caused reproductive toxicity of male mice involving activation of GnRH secretion in the hypothalamus by prostaglandin E2 receptors EP1 and EP2. Ecotoxicol Environ Saf . 2020 Sep 15;201:110712. WB ;Mouse. 32502905
- **[IF=3.23]** Takemiya et al. Microsomal Prostaglandin E Synthase-1 Facilitates an Intercellular Interaction between $CD4^+$ T Cells through IL-1β Autocrine Function in Experimental Autoimmune Encephalomyelitis. (2017) Int.J.Mol.Sci. 18 IHC ;Mouse. 29257087
- **[IF=2.6]** Ulises Cortes-Hernández. et al. Prostaglandin E2 suppresses KCNH1 gene expression and inhibits the proliferation of CaSki cervical cells through its four prostanoid PTGER subtypes. GENE. 2025 Jan;933:148997 WB ;Human. 39419236
- **[IF=2.253]** Chen Z et al. Seasonal expressions of prostaglandin E synthases and receptors in the prostate of the wild ground squirrel (Spermophilus dauricus). Prostaglandins and Other Lipid Mediators 148 (2020) 106412. IHC ;squirrel. doi:10.1016/j.prostaglandins.2020.106412