

bs-2349R**[Primary Antibody]****PDE5A Rabbit pAb****BioSS**
ANTIBODIES

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— DATASHEET —**Host:** Rabbit**Isotype:** IgG**Clonality:** Polyclonal**GeneID:** 8654**Target:** PDE5A**Immunogen:** KLH conjugated synthetic peptide derived from human PDE5A: 101-200/875.**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.

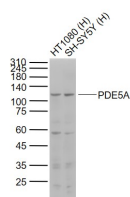
Background: The cGMP specific phosphodiesterase type 5A (PDE5A) family is comprised of 2 genes (PDE5A and PDE5B) each with multiple splice variants generated by RNA splicing and use of alternate initiation sites. The PDE5 is highly expressed in aorta and lungs, intestine, kidney adrenal gland cerebellum and cerebrum. In cerebellum the PDE5 is highly expressed during neonatal development in Purkinje cells layer. The PDE5 is also abundant in vascular smooth muscle regulating cGMP levels and vascular smooth muscle tonicity. In corpus cavernosum inhibition of PDE5 by sildenafil corrects erectile dysfunctions. The nitric oxide donor sodium nitroprusside (SNP) stimulate PDE5 activity by cGMP dependent kinase phosphorylation. PDE5A1 has 875 amino acids (99.5 kDa). The amino terminal 142 amino acid of the PDE5 gene showed no sequence homology with other PDEs and also contained serine 92 that is phosphorylated by cGMP kinases.

Applications: WB (1:500-2000)**IHC-P** (1:100-500)**IHC-F** (1:100-500)**IF** (1:100-500)**Flow-Cyt** (0.2µg/Test)

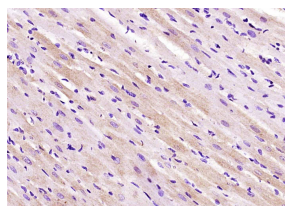
Reactivity: Human, Rat
(predicted: Mouse, Rabbit, Pig, Sheep, Cow, Chicken, Dog, GuineaPig, Horse)

Predicted MW.: 100 kDa

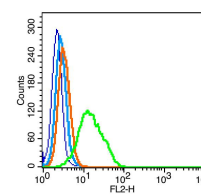
Subcellular Location: Cytoplasm

— VALIDATION IMAGES —

Sample: Lane 1: HT1080 (Human) Cell Lysate at 30 ug Lane 2: SH-SY5Y (Human) Cell Lysate at 30 ug Primary: Anti-PDE5A (bs-2349R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 98 kD Observed band size: 110 kD



Paraformaldehyde-fixed, paraffin embedded (rat heart tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PDE5A) Polyclonal Antibody, Unconjugated (bs-2349R) at 1400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.



Blank control: RSC96(blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice. Isotype Control Antibody: Rabbit IgG(orange) ; Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA ; Primary Antibody Dilution: 0.2 µg in 100 µL 1X PBS containing 0.5% BSA(green).

— SELECTED CITATIONS —

- **[IF=4]** JIA Kexin. et al. Inonotus obliquus (Chaga) against HFD/STZ-induced glucolipid metabolism disorders and abnormal renal functions by regulating NOS-cGMP-PDE5 signaling pathway. CHINESE JOURNAL OF NATURAL MEDICINES. 2024 Jul; 22(7): 580-581. Western blot ; Rat. 39059827

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

- **[IF=2.2]** Maheshika Somarathna. et al. Vascular remodeling in arteriovenous fistula treated with PDE5A inhibitors. PHYSIOL REP. 2025 Apr;13(9):e70331 WB ;Rat. 40300852