bs-5378R

- DATASHEET -

[Primary Antibody]

PLCZ1 Rabbit pAb



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Applications: IHC-P (1:100-500) Host: Rabbit Isotype: IgG IHC-F (1:100-500) Clonality: Polyclonal **IF** (1:100-500) GenelD: 89869 SWISS: Q86YW0 Reactivity: Human, Rat Target: PLCZ1 (predicted: Mouse, Pig, Cow, Dog, Horse) **Immunogen:** KLH conjugated synthetic peptide derived from human PLCZ1: 351-450/608. Predicted Purification: affinity purified by Protein A 70 kDa MW.: Concentration: 1mg/ml Subcellular Location: Cytoplasm ,Nucleus 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 production of the second messenger molecules diacylglycerol (DAG) and inositol 1,4,5-trisphosphate (IP3) is mediated by activated phosphatidylinositol-specific phospholipase C enzymes. In vitro, PLCZ1 hydrolyzes PtdIns(4,5)P2 in a Ca2+-dependent manner. It triggers intracellular Ca2+ oscillations in oocytes solely during M phase and is involved in inducing oocyte activation and initiating embryonic development up to the blastocyst stage. PLCZ1 is therefore a strong candidate for the egg-activating soluble sperm factor that is transferred from the sperm into the egg cytoplasm following gamete membrane fusion. It may exert an inhibitory effect on phospholipase-C-coupled processes that

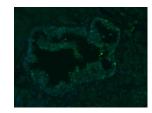
depend on calcium ions and protein kinase C, including CFTR

– VALIDATION IMAGES



trafficking and function.

Tissue/cell: rat testis tissue; 4% Paraformaldehyde-fixed and paraffinembedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-PLCZ1 Polyclonal Antibody, Unconjugated(bs-5378R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (human prostate); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (PLCZ1) Polyclonal Antibody, Unconjugated (bs-5378R) at 1:200 overnight at 4°C, followed by a conjugated Goat Anti-Rabbit IgG antibody (bs-0295G-AF488) for 90 minutes, and DAPI for nuclei staining.

- SELECTED CITATIONS -

- [IF=6.684] Meng Wang. et al. A Novel Assisted Oocyte Activation Method Improves Fertilization in Patients With Recurrent Fertilization Failure. Front Cell Dev Biol. 2021; 9: 672081 IF ;Human. 34368125
- [IF=4.5] Meng Wang. et al. Novel ACTL7A variants in males lead to fertilization failure and male infertility. ANDROLOGY-US. 2023 Nov;: IF ;Human. 37991128

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

- [IF=3.322] Xiaopei Zhou. et al. Actl7a deficiency in mice leads to male infertility and fertilization failure. BIOCHEM BIOPH RES CO. 2022 Oct;623:154 IF ;Mouse. 35921706
- [IF=2.98] Zhou, Xiaopei. et al. A novel homozygous mutation in ACTL7A leads to male infertility. MOL GENET GENOMICS. 2022 Dec;:1-8 IF ;Human. 36574082
- [IF=3.2] Rui Guo. et al. Homozygous deleterious variants in the C-terminal of TDRD5 impair spermiogenesis, causing severe oligoasthenoteratozoospermia in humans. ANDROLOGY-US. 2024 Jun;: IF ;Human. 38847152