bs-7136R **[Primary Antibody]**

CATSPER3 Rabbit pAb

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DATASHEET

Host: Rabbit **Isotype:** IgG

Clonality: Polyclonal

GeneID: 347732 **SWISS:** Q86XQ3

Target: CATSPER3

Immunogen: KLH conjugated synthetic peptide derived from human CATSPER3: 201-300/398.

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: CatSpers (cation channel, sperm associated proteins) are ion transport proteins located on the surface of sperm cells in the principal piece of the sperm tail. CatSpers are vital to sperm motility, fertilization and cAMP-mediated calcium influx in sperm. There are four CatSper proteins in mammalian sperm, namely CatSper (or CatSper1), CatSper2, CatSper3 and CatSper4. CatSper proteins contain a single, six-transmembrane-spanning segment and exhibit the voltage-dependent Ca2+ channel four-repeat structure. CatSper proteins are believed to assemble into a heterotetrameric complex, forming an alkalinization-activated Ca2+-selective channel. Mutations in any of the genes encoding CatSper family proteins can result in male infertility. CatSper3 plays an important role in the hyperactivated motility of sperm cells, a process that is required in the preparation of sperm for fertilization.

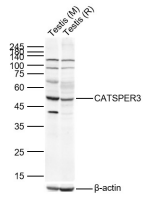
Applications: **WB** (1:500-2000)

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

Predicted MW.: 46 kDa

Subcellular Location: Cell membrane

VALIDATION IMAGES



Sample: Lane 1: Mouse Testis Lysates Lane 2: Rat Testis Lysates Primary: Anti-CATSPER3 (bs-7136R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 46kDa Observed band size: 46kDa

SELECTED CITATIONS

- **[IF=8.071]** Wen-bo Yuan. et al. TET1 mediated male reproductive toxicity induced by Bisphenol A through Catsper-Ca2+ signaling pathway. Environ Pollut. 2022 Mar;296:118739 WB ;Mouse. 34953956
- **[IF=4.5]** Xiangli Li. et al. Sodium arsenite impairs sperm quality via downregulating the ZMYND15 and ZMYND10. ENVIRON TOXICOL. 2024 May;: WB ;Rat. 38798119