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CATSPER Rabbit pAb

Catalog # AP97235

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q8NEC5
Other Accession	Q8NEC5
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	90091
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human CATSPER
Epitope Specificity	551-650/780
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the cation channel sperm-associated (TC 1.A.1.19) family.
SUBUNIT	Heterotetramer; possibly composed of CATSPER1, CATSPER2, CATSPER3 and CATSPER4 (Potential). Component of the CatSper complex. Interacts with CATSPER3 and CATSPER4. Interacts with Ca(v)3.3/CACNA1I, leading to suppress T-type calcium channel activity.
DISEASE	Defects in CATSPER1 are the cause of spermatogenic failure type 7 (SPGF7) [MIM:612997]. An infertility disorder characterized by non-motile sperm or sperm motility below the normal threshold, low sperm count, increased abnormally structured spermatozoa, and reduced semen volume.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	CATSPER1 is a voltage-gated calcium channel that plays a central role in sperm cell hyperactivation. It controls calcium entry to mediate the hyperactivated motility, a step needed for sperm motility which is essential late in the preparation of sperm for fertilization. It is activated by intracellular alkalinization.

Additional Information

Gene ID	117144
Other Names	CATSPER; SPGF7; KSper; CTSR1_HUMAN; CATSPER1; hCatSper; CTSR1_MOUSE; cation channel sperm associated 1; cation channel, sperm associated 1
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	CATSPER1
Function	Pore-forming subunit of the CatSper complex, a sperm-specific voltage-gated calcium channel that plays a central role in calcium- dependent physiological responses essential for successful fertilization, such as sperm hyperactivation, acrosome reaction and chemotaxis towards the oocyte.
Cellular Location	Cell projection, cilium, flagellum membrane; Multi-pass membrane protein {ECO:0000250|UniProtKB:Q91ZR5}. Note=Specifically located in the principal piece of the sperm tail.
Tissue Location	Testis-specific.

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