

# CATSPER1 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP12995a

## **Product Information**

Application	WB, E
Primary Accession	<u>Q8NEC5</u>
Other Accession	<u>NP_444282.3</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB32588
Calculated MW	90091
Antigen Region	36-65

### **Additional Information**

Gene ID	117144
Other Names	Cation channel sperm-associated protein 1, CatSper1, hCatSper, CATSPER1
Target/Specificity	This CATSPER1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 36-65 amino acids from the N-terminal region of human CATSPER1.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CATSPER1 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

### **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.

### Background

Calcium ions play a primary role in the regulation of sperm motility. This gene belongs to a family of putative cation channels that are specific to spermatozoa and localize to the flagellum. The protein family features a single repeat with six membrane-spanning segments and a predicted calcium-selective pore region.

#### References

Li, H., et al. Fertil. Steril. 92(3):1141-1146(2009) Avenarius, M.R., et al. Am. J. Hum. Genet. 84(4):505-510(2009) Zhang, D., et al. J. Biol. Chem. 281(31):22332-22341(2006) Li, H.G., et al. Asian J. Androl. 8(3):301-306(2006) Clapham, D.E., et al. Pharmacol. Rev. 57(4):451-454(2005)

#### Images



CATSPER1 Antibody (N-term) (Cat. #AP12995a) western blot analysis in HepG2 cell line lysates (35ug/lane).This demonstrates the CATSPER1 antibody detected the CATSPER1 protein (arrow).

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