



Rabbit Anti-CATSPER2 antibody

SL10473R

Product Name:	CATSPER2
Chinese Name:	阳离子通道精子相关蛋白2抗体
Alias:	CTSR2_HUMAN; Cation channel sperm-associated protein 2; CatSper2; CatSper 2; CatSper-2; cation channel sperm-associated protein 2 isoform 2; sperm ion channel; cation channel sperm-associated protein 2; Putative ion channel protein CATSPER2 variant 1; Putative ion channel protein CATSPER2 variant 2; Putative ion channel protein CATSPER2 variant 3; Sperm associated cation channel 2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Sheep,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	58kDa
Cellular localization:	Extracellular matrix
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CATSPER2:1-100/530
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	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. This gene is part of a tandem repeat on chromosome 15q15; the second copy of this gene is thought to be a pseudogene. Additional splice variants have been described but their full-length nature has not been determined. [provided by RefSeq, Aug 2008].

Function:

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. Activated by extracellular progesterone and prostaglandins following the sequence: progesterone > PGF1-alpha = PGE1 > PGA1 > PGE2 >> PGD2. The primary effect of progesterone activation is to shift voltage dependence towards more physiological, negative membrane potentials; it is not mediated by metabotropic receptors and second messengers. Sperm capacitation enhances the effect of progesterone by providing additional negative shift. Also activated by the elevation of intracellular pH.

Subunit:

Heterotetramer; possibly composed of CATSPER1, CATSPER2, CATSPER3 and CATSPER4 (Potential). Component of the CatSper complex. Interacts with Ca(v)3.3/CACNA1I, leading to suppress T-type calcium channel activity.

Subcellular Location:

Cell projection, cilium, flagellum membrane; Multi-pass membrane protein. Note=Specifically located in the principal piece of sperm tail.

Tissue Specificity:

Testis-specific.

DISEASE:

Deafness-infertility syndrome (DIS) [MIM:611102]: Characterized by deafness and infertility and is caused by large contiguous gene deletions at 15q15.3 that removes both STRC and CATSPER2 genes. Note=The disease is caused by mutations affecting the gene represented in this entry.

Similarity:

Belongs to the cation channel sperm-associated (TC 1.A.1.19) family.

SWISS:

Q8NHT9

Gene ID:

117155

Database links:

[Entrez Gene: 117155](#) Human

[Oimim: 607249](#) Human

[SwissProt: Q8NHT9](#) Human

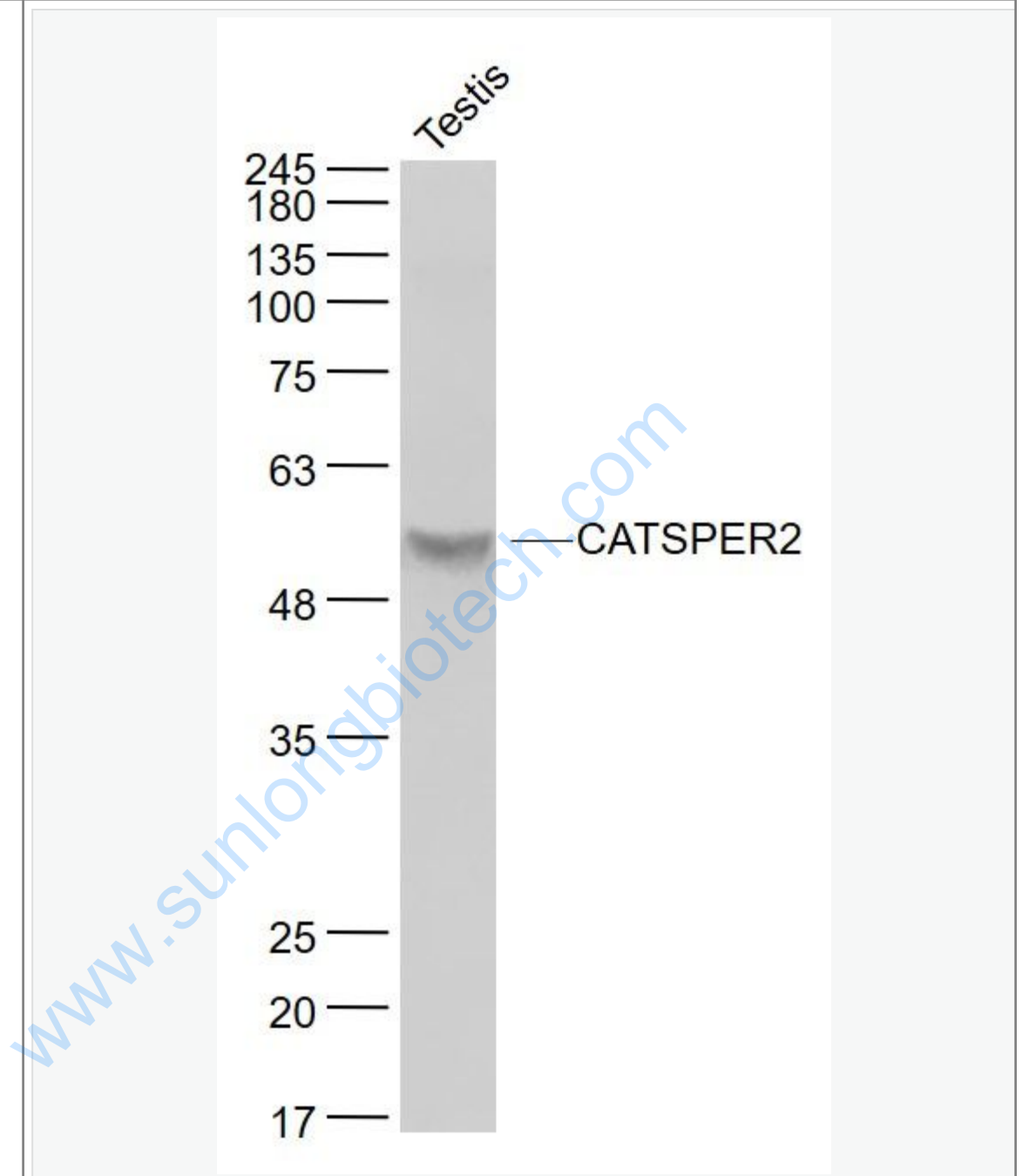
[Unigene: 662284](#) Human

Important Note:

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

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Picture:



Sample:

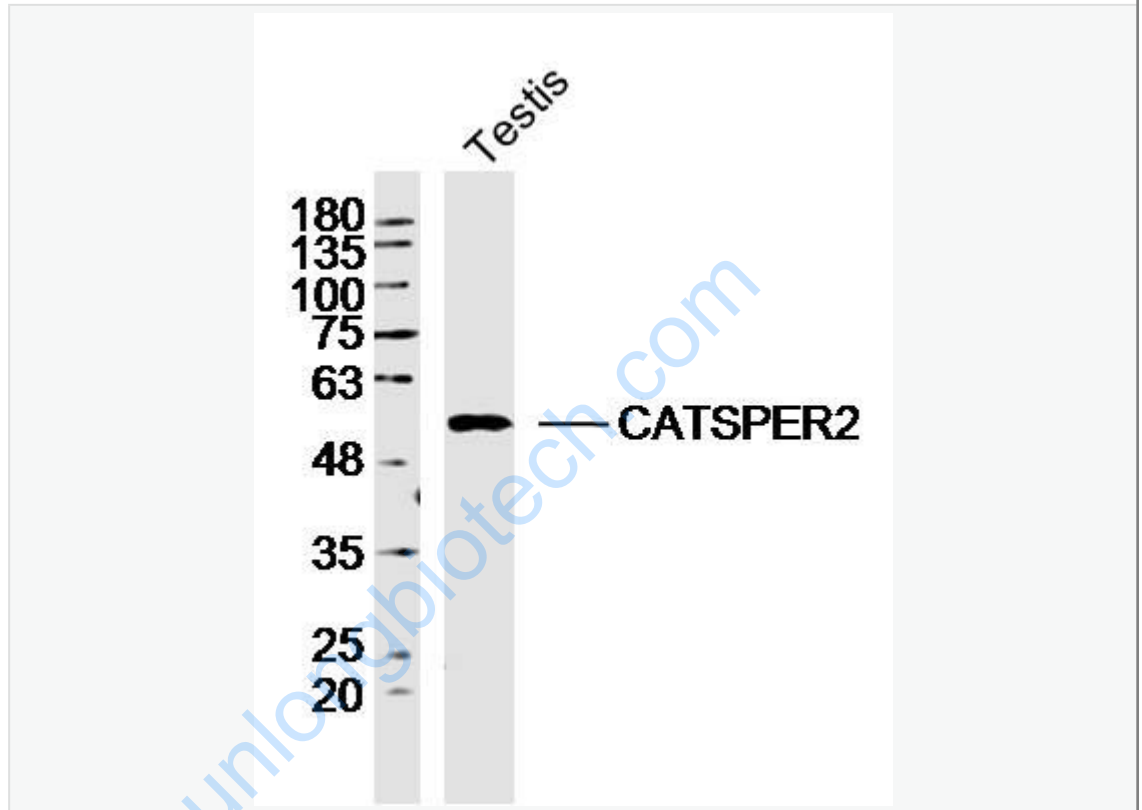
Testis(Rat) Lysate at 40 ug

Primary: Anti- CATSPER2 (SL10473R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 58 kD

Observed band size: 58 kD



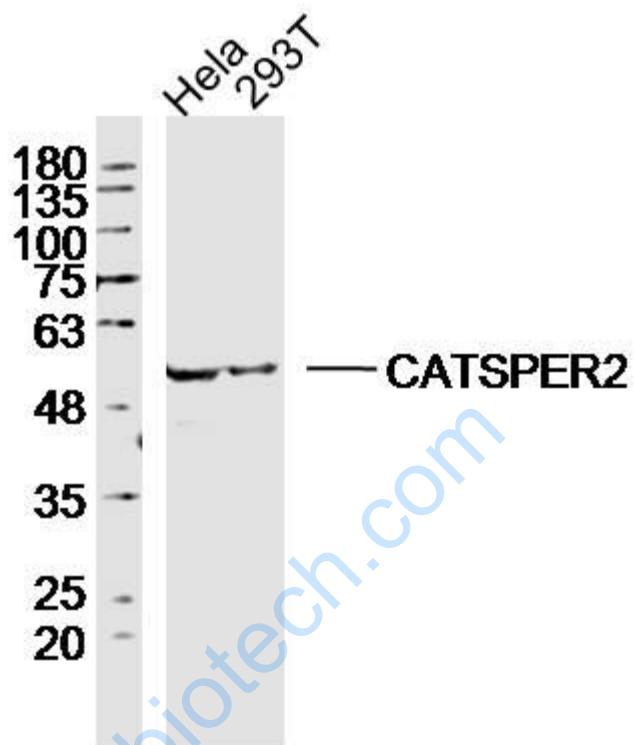
Sample: testis (Mouse) Lysate at 40 ug

Primary: Anti-CATSPER2(SL10473R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 58 kD

Observed band size: 58 kD



Sample:

HeLa (human) Cell Lysate at 40 ug

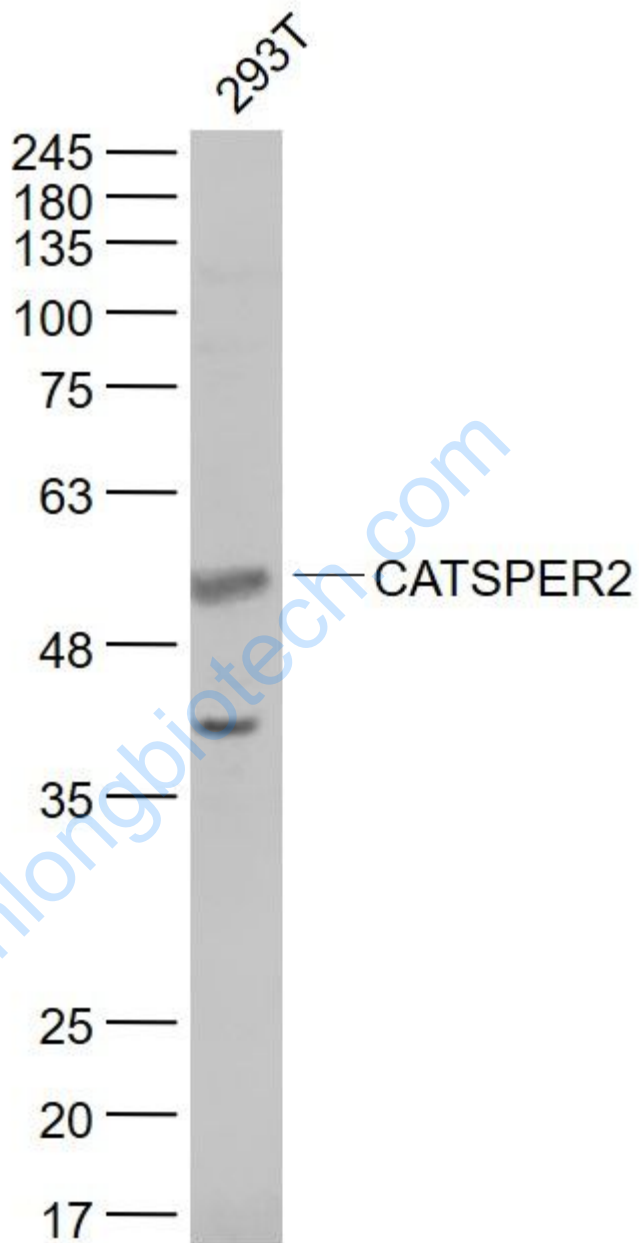
293T (human) Cell Lysate at 40 ug

Primary: Anti-CATSPER2(SL10473R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 58 kD

Observed band size: 58 kD



Sample:

293T(Human) Cell Lysate at 30 ug

Primary: Anti- CATSPER2 (SL10473R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 58 kD

	Observed band size: 58 kD
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