Datasheet for ABIN7043028

anti-CATSPER4 antibody (Extracellular)

1 Image

Go to Product page

Overview

Quantity:	25 µL
Target:	CATSPER4
Binding Specificity:	AA 90-105, Extracellular
Reactivity:	Mouse
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This CATSPER4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunofluorescence (IF), Immunochromatography (IC)

Product Details

Purpose:	A Rabbit Polyclonal Antibody to CatSper4 Channel
Immunogen:	Immunogen: Synthetic peptide Immunogen Sequence: (C)NSYLGQKHYELFSTID, corresponding to amino acid residues 90-105 of mouse CatSper4
Isotype:	IgG
Specificity:	1st extracellular loop
Cross-Reactivity:	Mouse, Rat
Predicted Reactivity:	Rat - identical, human -15,16 amino acid residues identical
Characteristics:	Anti-CatSper4 (extracellular) Antibody is directed against an epitope of mouse CatSper4. Anti-CatSper4 (extracellular) Antibody (ABIN7043028, ABIN7044103 and ABIN7044104) can be used

Product Details

	in western blot and immunocytochemistry applications. It has been designed to recognize CatSper4 from rat, mouse and human samples.
Purification:	Affinity purified on immobilized antigen.

Target Details

Target:	CATSPER4
Alternative Name:	CATSPER4 (CATSPER4 Products)
Background:	Cation channel sperm-associated protein 4,During mammalian fertilization, Ca2+ signaling plays a central role in sperm capacitation and motility to the fusion between sperm and egg1. Several Ca2+-permeable ion channel proteins have been characterized in mammalian sperm. However, only the four mammalian CatSper members (CatSpers 1-4) are restrictively expressed in the testis and are clearly shown to be required for male fertility2.CatSper channels are named after the first putative cation channel of sperm3. CatSper4 contains a single ion transport domain comprised of 6 transmembrane spanning regions, where the fourth transmembrane region resembles a voltage sensor and a pore forming region lies between transmembrane regions 5 and 6. The pore contains the consensus sequence TxDxW indicative of a probable Ca2+ selective channel4. The four CatSper proteins are primarily localized to the plasma membrane of the distal portion of the sperm tail and presumably form a heterotetrameric, pH - and voltage-dependent Ca2+-permeable channel 5. CatSper 4 is highly expressed in testis and expressed at low levels in placenta and lung6.Male mice deficient in any of the four CatSper are completely sterile but exhibit no other apparent abnormality. The major phenotypes of the null sperm are a lack of hyperactivated motility, a gradual loss of motility after isolation, and an inability to penetrate zona-intact eggs7. Alternative names: CatSper4, Cation channel sperm-associated protein 4
Gene ID:	329954
NCBI Accession:	NM_198137
UniProt:	Q8BVN3

Application Details

Application Notes:	Antigen preadsorption control: 1 µg peptide per 1 µg antibody Application Dilutions Immunohistochemistry paraffin embedded sections ihc: N/A Application Dilutions Western blot wb: 1:1000

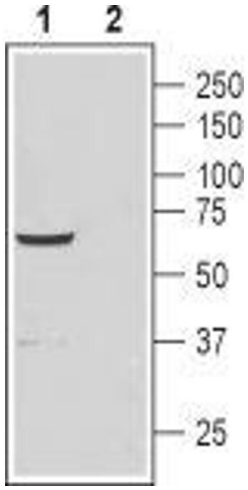
Application Details

Comment:	Cited Application: ICC Negative Control: (ABIN7235039) Blocking Peptide: (ABIN7235039)
Restrictions:	For Research Use only

Handling

Format:	Lyophilized
Reconstitution:	0.2 mL double distilled water (DDW).
Concentration:	1 mg/mL
Buffer:	PBS pH 7.4
Storage:	4 °C,-20 °C
Storage Comment:	Storage before reconstitution: The antibody ships as a lyophilized powder at room temperature. Upon arrival, it should be stored at -20°C. Storage after reconstitution: The reconstituted solution can be stored at 4°C for up to 1 week. For longer periods, small aliquots should be stored at -20°C. Avoid multiple freezing and thawing. Centrifuge all antibody preparations before use (10000 x g 5 min).

Images



Western Blotting

Image 1. Western blot analysis of rat testis lysate: - 1. Anti-CatSper4 (extracellular) Antibody (ABIN7043028, ABIN7044103 and ABIN7044104), (1:1000).2. Anti-CatSper4 (extracellular) Antibody preincubated with CatSper4 (extracellular) Blocking Peptide (#BLP-CC304).