

Table S1. Primary and secondary antibodies employed in this study.

Antibody	Host species	Vendor	Catalog no.	Antigen ^a	% Identity ^b	Dilution ^c		Antigen retrieval ^f
						IB	IF	
PIEZO 1	Rabbit	Proteintech	15939-1-AP	Human 67-373 aa	56	1:250 ^d	1:200	TE pH 9, 0.2% Triton X-100
TRPV1	Rabbit	Antibodies-online	ABIN351235	N/A	N/A	1:500 ^d	1:400	0.2% Triton X-100
TRPV4	Rabbit	Novus Biologicals	NBP2-41262	Human 380-430 aa	78	1:500 ^d	1:400	0.2% Triton X-100
TRPV6	Rabbit	Merck	SAB2106366	Mouse 838-987 aa	65	1:250 ^d	1:400	0.2% Triton X-100
CACNA1G	Rabbit	GeneTex	GTX60133	Human 889-939 aa	96	1:250 ^e	1:200	Citrate pH 6
KCNH6	Rabbit	Merck	AV35480	Human 1779-1928 aa	84	1:250 ^d	1:200	Citrate pH 6
SCN (Pan antibody)	Mouse	Merck	S8809	Human 4979-5032 aa	100	1:200 ^e	1:100	TE pH 9, 0.2% Triton X-100
LRRC8D	Rabbit	Proteintech	11537-1-AP	Human 515-858 aa	93	1:500 ^d	1:200	TE pH 9, 0.2% Triton X-100
α -Tubulin	Mouse	Merck	T9026	Chicken microtubules	N/A	1:25000 ^d	-	-
Rabbit IgG HRP	Goat	Bio-Rad	172-1019	-	-	1:5000 ^d	-	-
Mouse IgG HRP	Goat	Bio-Rad	172-1011	-	-	1:5000 ^d	-	-
Rabbit IgG Cy3	Sheep	Merck	C2306	-	-	-	1:1000	-

^a Exact amino acid sequence of the mammalian ortholog used for the synthetic peptide employed for immunization, or amino acid region where the peptide was located (as available from the vendor).

^b Percentage of identity of the immunization peptide or amino acid region with the seabream ortholog.

^c IB: immunoblotting; IF: immunofluorescence microscopy.

^d Blocking in 5% milk.

^e Blocking in 3% BSA.

^f Buffer employed for antigen retrieval prior to immunostaining.

Table S2. Nucleotide sequences of the primers employed for RT-PCR analysis of ion channel expression in seabream spermatozoa.

GenBank accession	Transcript symbol	Forward sequence	Reverse sequence
XM_030441522	<i>piezo1</i>	TGAGATCTCCCACTCCATCA	CCCCAAGACATCTTTGCAGT
XM_030400112	<i>trpm4</i>	GGCTTTGGAGAGTGAGATGG	GGTAACTGAGTCCAGCGATGA
XM_030438142	<i>trpv1</i>	GGAGAAGAGACTGGGCACTG	CGTAGGTTTGAATGCCTCGT
XM_030415727	<i>trpv4</i>	AGGGTGGATGAGGTGAACTG	TATCAGTGTCTGGGCGTCAG
XM_030393613	<i>trpv6</i>	GACAGAAACGACCCGATGTT	TTCAAATGTTTACGCCTCAG
XM_030399309	<i>cacna1g</i>	GAGCCTCAGTCTGGCCTCTA	TTTGTGTGTGTGGAGGGTTC
XM_030422644	<i>kcnc4</i>	CAAATGTGGCCCTTTCAGAG	CTGCACAGCGTCTACTCCAC
XM_030401465	<i>kcnh6</i>	GGTCACCCCTGAAACTGAGA	ACCTGAATCGCAGATTGGTC
XM_030411011	<i>scn1b</i>	CCGAGGTCATGATGTACGTG	TCCAGTTGTTGTCGAGGAGA
XM_030403786	<i>lrrc8d</i>	G TTCAGATGCACCAAGCTCA	TAAAGGGTGCGTTGCTCTCT