

doi: 10.1387/ijdb.150364nn

SUPPLEMENTARY MATERIAL

corresponding to:

**Evolution of the vertebrate claudin gene family:
insights from a basal vertebrate, the sea lamprey**

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Full text for this paper is available at: <http://dx.doi.org/10.1387/ijdb.150364nn>

TABLE S1

LIST OF ACCESSION NUMBERS OF ALL PROTEIN SEQUENCES USED FOR PHYLOGENETIC ANALYSIS

Gene name	Accession number
Mouse (<i>Mus musculus</i>)	
Claudin 1	NP_057883.1
Claudin 2	NP_057884
Claudin 3	NP_034032
Claudin 4	NP_034033
Claudin 5	NP_038833
Claudin 6	NP_061247
Claudin 7	NP_058583
Claudin 8	NP_061248
Claudin 9	NP_064689
Claudin 10	NP_076367.2
Claudin 11	NP_032796
Claudin 12	NP_075028
Claudin 13	NP_065250
Claudin 14	NP_062373.3
Claudin 15	NP_068365
Claudin 16	NP_444471
Claudin 17	NP_852467
Claudin 18	NP_062789
Claudin 19	NP_001033679
Claudin 20	NP_001095030
Claudin 22	NP_083659
Claudin 23	NP_082274
Claudin 24	NP_001104788
Claudin 25 (Claudin Domain 1)	NP_001239379
Claudin 26 (transmembrane protein 114)	NP_083346
Claudin Domain 2	NP_083125
Chicken (<i>Gallus gallus</i>)	
Claudin 1	NP_001013629
Claudin 2	NP_001264551
Claudin 3	NP_989533
Claudin 4	XP_003642430
Claudin 5	NP_989532
Claudin 8	XP_004938436
Claudin 10	NP_001264696
Claudin 11	XP_422797
Claudin 12	XP_004939337
Claudin 14	XP_004934594
Claudin 15-like	XP_422589
Claudin 16	XP_426702
Claudin 16-like	XP_001232502
Claudin 18	XP_426691.2
Claudin 19	XP_003642589.2
Claudin 20	XP_004935700
Claudin 22-like	XP_004941124
Claudin 25	XP_004948118
Claudin Domain 1	NP_001012838
<i>Xenopus tropicalis</i>	
Claudin 1	NP_001015704
Claudin 2	XP_004916813
Claudin 3	NP_001005709
Claudin 4	NP_001016663
Claudin 4- like/Cldn34	ENSXETT00000034379
Claudin 5	NP_001006707
Claudin 6.1	NP_988873
Claudin 6.2	ENSXETT00000039790
Claudin 7	ENSXETT00000016483
Claudin 8-like	XP_004912214
Claudin 8.3	NP_001120297

TABLE S1 (CONTINUED)

LIST OF ACCESSION NUMBERS OF ALL PROTEIN SEQUENCES USED FOR PHYLOGENETIC ANALYSIS

Gene name	Accession number
Claudin 10	XP_002939572
Claudin 11	ENSXETT00000020222
Claudin 12	NP_001016851
Claudin 14	XP_004912176
Claudin 15.1	NP_001096379
Claudin 15.2	XP_002933422
Claudin 16	XP_002934087
Claudin 16-like	XP_002937090.2
Claudin 18	XP_002938162
Claudin 19	XP_002937080
Claudin 22	XP_002934304
Claudin 23	XP_004911118
Claudin D1	NP_001016259
Sea lamprey (<i>Petromyzon marinus</i>)	
Claudin k/Cldn31	ENSPMAT0000007899
Claudin 1	MIGGVNGTRVPVSSLIEGFAEPDADENAVMMALCALGGHTGLWGRCLNLPShRGELCLTPGFLQEWAPRFSEPGNHNSQLDPVRTALCRAQLLLPLVALTLLLLTLALALIGCASNSS LALIPCAILTLLAGLCTLTASSVLSLPCVDASSSPGWSTFLALASACQDIAATGLLIWARAASLRHYRSVL
Claudin 3a	MQCKVYDMSMLALGQDLQAARALTVVAVVAAAAALLVAIAGAKCTTCIEEETKARVSIAGAGFVLAGLLELVPSVWSANSVVRDFYNPLVPDSTKREIGAAMFIGWAAATLLVLGGAL LCCSCPQKQRYAAPPKGGGGGGGGGGGGDDDDRRKGG
Claudin 3b	KP677499
Claudin 8	KP677500
Claudin 9	MQCKVHDSMLALNGELQAARAMTVLANLLALLAVGVAATGMRCCTTCGDEDEGSAGKRLTATGGVGFALCGLLMLAPVSWTAHNIVRDFYDVGVPVTLKRELGSALYVGWGAATLLFL GGLLCCSWPRPEPGRPRPFYGLQPGGLAMHGTGPNAPGAPLRMHSAAAAAA
Claudin 10	ENSPMAT0000005506
Claudin 11	MGASCFQLLGVSLGLLGWVALVATATNDWVLLCSYGFTACVRFEDMGSKGLWAQCISNNGIDHCKPFAEILALPVYIQVCRALMVVACVLGLPAILLASTGLKCIRLGEETASEKAQR VVAGGVMLLVLGLCTLVATTWFPVGHKESLKGVVNFGYSLFAGWVGTALAIVSGALLCCCSGSKERRYAYPATASAAA
Claudin 12	MSCGGCFVLVWSLCGAAALCLLVAALMPSWRDLILVDPTKRSIVVRHGLWVRCAGYEGDVPGGVSWAAAWFGPDSGKEGVDGGGSPGCVVRRDSAWPIATDSLDRLLQLGVPT ACLVALVALALNVSGAVVLCRSGRRSGRLYGEDEDSTLSSTSSSSSEFSSKRKRKKKKAQCCQFNPCGCQVVASVLYLLASALVLPALWALLSVDELNRAHVSGDARWRPGE AVPVCLAACAGLLAAGGLAMWYCTCRPLPPAPLPPAPLALGSLGMEALGLSGRAGPAEACGRSTRQSHRTTGSPAGFTSVSSRPMSRATLELDIPMYELH
Claudin 15	MALDVVGTLLCIAGWTLVGTIITNHYWKVSTVAGSVITNTIYENLWQACATDSMGVSNCRDFDSMLNLPGHVQACRALVITAIVLGGFFGTLAFLGMRCNTIVSSDAEVKGRIVFSAGII YILEGLSAIIAVSWYAAQVVAEFFDPFYAGTKYELGPALYMGWAGSGLAILGGLLCCVCTGARSTQRDHTFKYSAARAATPISTATPRTILDMEGQTYARQQYY
Claudin 16	MITALQLLAFFFALVSASFVATWDCWMVNADDSLEVSQKCRGLVWECVTNAFDGIRTCQDFDSILAEHPLKIVLSRSLILTADILACFACIILGLDCVVRVLSNEPRIKTRICYTAGFI YLLAGIPGMVGSVWYAVDVYVERSTLVQQNVLFGIQYEFGWSCWLMAGSMACILAGIVLTCCVYLFRDANAARLHRSPPYVAPRTSLGKMYAMASHV
Claudin 18	ENSPMAT0000001477
Claudin 19a	ENSPMAT0000001243
Claudin 19b	KP677501
Claudin 20	ENSPMAT0000001161
Claudin-like	ENSPMAT00000011472
<i>C. elegans</i>	
CLC-5	NP_509258

Where the accession numbers are not available, the protein sequence is supplied.

