Supplemental Figure S1 for Teaching Purposes. *Conservation of Piezo proteins*. Multiple sequence alignment reveals conservation between Piezo proteins. Shades of blue indicate degree of conservation. A hydrophobicity plot of human Piezo1 is show below the amino acid sequence. Many blocks of conservation align with regions of hydrophobicity. Blocks of differences between Piezo1 and Piezo2 proteins, which cluster and align together, are seen.

Arabidopsis/1-2462 Celegans/1-1869 Drosophila/1-2621 Zebrafish_2/1-2955 Frog_2/1-2797 Mouse_2/1-2824 Rat_2/1-2833 Dog_2/1-2833 Human_2/1-2752 Macaca_2/1-2753 Zebrafish_1/1-2538 Frog_1/1-2474 Rat_1/1-2535 Mouse_1/1-2546 Dog_1/1-2513 Macaca_1/1-2431 Human_1/1-2521 Hydrophobicity	1 MASFLYGFLLFSLLLAAAL INWSV ISFLD 1	GELVH ILDYY LLMFPVSPFVPLATRRNFKGSVTAFF I ILLTLSTI LLFbLb IPLFPEPSS ITMRGOTGYLLKSLCCCSVI L IYLL IPLFSEPTK ITMGGHTGRLLKSLCVSSLE L IYLL IPLFSEPTKATMGGHTGRLLGSLC ITSLE L IYLL IPLFSEPTKATMGGHTGRLLKSLCFFISLE L IYLL IPLFSEPTKTTMGGHTGRLLKSLCFFISLE L IYLL IPLFSEPTKTTMGGHTGRLLKSLCFFISLE L IYLL IPLFSEPTKTTMGGHTGRLLKSLCFFISLE LLYLLL LPWFQWPNKHTLRGHTGCY IKALFSTSL LYLLLLPWFQWPNKHTLRGHTGCY IKALFSTSL LYLLLLPWLPGSPRHS IPGHTGRLLRALLCLSLI LLFLLLLPWLPGPSRHS IPGHTGRLLRALLCLSLI LLFLLLLPWLPGPGRRS IPGHTGRLLRALLCLSLI LLFLLLLPWPPGGPTRHSLOGHTGRLLRALLCLSLI LLFLLLLPWLPGPGRRS IPGHTGRLLRALLCLSLI LLFLLLLPWLPGPGRRS IPGHTGRLLRALLCLSLI LLFLLLLPWLPGPGRRS IPGHTGRLLRALLCLSLI LLFLLLLPWLPGPGRRS IPGHTGRLRALLGLSLI			-HWF LVFATSLGSYLTVKRVASQPVGAEQLE IGMFMASLGVWLLCRKLLHQRPTEDMAQDN IGMF IASLATLLVCRKLVQKTVTEEDAQ IGMF IASLT IWLVCRT IVKKPDTEE IAQ IGMF IASLT IWLVCRT IVKKPDTEE VAQ IGMF IASLT IWLVCRN IVQKPVTEETAQ IGMF IASLT IWLLCRN IVQKPVTDEAAQ IGMF IASLT IWLLCRN IVQKPVTDEAAQ IGWF IASLT IWLLCRN IVQKPVTDEAAQ IGVF IMSL ITL ILCSRLLKKRDEGSVPH IGMFVVSALCLGLCRLVTKKRQSQRTQ IGVLVASSLCLGLCGRLTRKARQSRTQ IGVLVASSLCLGLCGRLTRKARQSRTQ IGVLVASVCLGLCGRLTRKARQSRTQ IGVLVASVCLGLCGRLTRKARQSRTQ IGVLVASVCLGLCGRLTRKARQSRTQ IGVLVASVCLGLCGRLTRKARQSRTQ IGVLVXSVCLGLCGRLTRKARQSRTQ IGVLVXSVCLGLCGRLTRKARQSRTQ IGVLVXSVCLGLCGRLTRKARQSRTQ IGVLVXSVCLGLCGRLTRKARQSRTQ IGVLVXSVCLGLCGRLTRKARQSRTQ IGVLVXSVCLGLCGRLTRKARQSRTQ IGVLVXSVCLGLCGRLTRKARQSRTQ IGVLVXSVCLGLCGRLTRKARQSRTA IGVLXX	NGEVVDGQAENAQTSSQPS QQFLSBEKEBENEKLENEEDENDNNDDDDDENLF		DD IL KLPLHFDDQLPTSSH- LTTPLQ QQQQQLRRVSM ISQH ESTKMK ILRAVGGVAAK LKE IIGN BESTKLK ILRR IASFASVLKEF IGN BESTKLK ILRRFASVASK LKEF IGN BESTKLKMFRRLASVASK LKEF IGN BESTKLKMFRRLASVASK LKEF IGN BESTKLKMFRRLASVASK LKEF IGN BESTRLKMFRRLACVASK LKEF IGN BESTRLKMFRRLACVASK LKEF IGN BESTRLKMFRRLACVASK LKEF IGN BESTRS LKAMFRRLACVASK LKEF IGN BESTRS LAGRENTATAGR BESTRS LAGRENTAGR BESTRS LAGR BESTRS LAGRENTAGR BESTRS LAGR	HPP HFEGLVK IS PLFCLATL FFAAVLFS: L ITTAGQVVVT IMLGMTGVTLPS: I ITTAGKVV IT ILLGLTGMMLPS: M ITTAGKVVVT ILLGSSGMMLPS: L LTTAGKVVVT ILLGSSGMMLPS: L LTTAGKVVVT ILLGSSGMMLPS: L LTTAGKVVVT ILLGSSGMMLPS: L LTTAGKVVVT ILLGAG ITLPS: L LTTAGKVVVT ILLALAG ITLPS: L LVTSGRMLV IVLLALAG IAHPS: L LVTAGGRTLA IVLLALAG IAHPS: L LVAAGRTLA IVLLALAG IAHPS: L LVAAGRTLA IVLLALAG IAHPS:	NSSSH- PFGFYPL IFLLSGTYWATCOTLOR -GFAI SSAVYFFVFLGLCTWWSLCKTFDKLLFSC LTSAVYFFVFLGLCTWWSCCRVFDPL IFSC LTSAVYFFVFLGLCTWWSWCRTFDPLLFGC LTSAVYFFVFLGLCTWWSWCRTFDPLLFGC LTSSVYFFVFLGLCTWWSWCRTFDPLLFSC LTSSVYFFVFLGLCTWWSWCRTFDPLLFSC LTSSVYFFVFLGLCTWWSWCRTFDPLLFSC LTSSVYFFVFLGLCTWWSWCRTFDPLLFSC AFSAFYLLF IGVCTWWACHFP ISQLGFNT AFSSVYLWVFLA ICTWWSCHFPLSSLGFNT AFSSVYLWVFLA ICTWWSCHFPLSPLGFNT AFSSVYLWVFLA TCTWWSCHFPLSPLGFNT AFSSVYLWFLATCTWWACHFP ISLLGFST	-SNHNYPDTT -LSSTS LLRCVMVVLVLHSLS IVSYQTEW -MQSHI LCVLMA IFSAGHL IVLY INOPOF -LQEA . LCVLLMA IFSAGHL IGLYLYQFOF -FQEA V LCVLLA IFTAGHL IGLYLYQFOF -FQEA V LCVMAFFTGGHLVCLYLYQFOF -QADA ICV IVGFFTGGHM ICLY IYQTFF -IQQMF LCVMVSCFGAGHL ICLYCYTFF -VQSVI LCVMVSCFGAGHL ICLYCYTFF -IQTVI LCVMVSCFGAGHL ICLYCYTFF -AQTVI	"SAPST98 LLNHTTLTAR295 LTSPTDGYTS337 LIPPNDGYTS336 LVPPNDYYAR306 LVPNDYYAR306
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Celegans/1-1869 Drosophila/1-2621 1 Zebrafish_2/1-2955 1 Frog_2/1-2797 1 Mouse_2/1-2824 1 Rat_2/1-2833 1 Dog_2/1-2833 1 Human_2/1-2752 Macaca_2/1-2753 2 Ebrafish_1/1-2538 Frog_1/1-2474 Rat_1/1-2535 1 Mouse_1/1-2546 1 Dog_1/1-2513 Macaca_1/1-2431	1299KYDYGFR ITARSALVE I I IFMLVS LOSYMFS 686 EDFSKA CAVETKEGN TOFDV TALSFLYFO IR 1FH 1285 ALKPGE CPK ITHQVVLLWDT ICFAF I IFOLR IFK 1411PGVD CELPKDEAG I IWDS ICFAF LLLQRRVFM 1416DDSR CKLPSGEAG I IWDS ICFAFLLLQRRVFM 1416DDSR CKLPSGEAG I IWDS ICFAFLLLQRRVFM 1423DDSS CKLPSGEAG I IWDS ICFAFLLLQRRVFM 1439ANSPCTLPSGEAG I IWDS ICFAFLLLQRRVFM 1400ANSPCTLPSGEAG I IWDS ICFAFLLLQRRVFM 1400CNKD CSLPVEEAG I IWDS ICFAFLLLQRRVFM 1270CNKD CSLPVEEAG I IWDS ICFFFLLLQRRVFL 1256 KTRDRD CLLPVEEAG I IWDS ICFFFLLQRRVFL 1256 KTRDRD CLLPVEEAG I IWDS ICFFFLLQRRVFL 1261 LSRDRD CLLPVEEAG I IWDS ICFFFLLQRRVFL 1262 LSRDRD CLLPVEEAG I IWDS ICFFFLLQRRVFL 1263 MGRDDD CLLPVEEAG I IWDS ICFFFFLLQRRVFL 1264 MGRDDD CLLPVEEAG I IWDS ICFFFLLQRRVFL 1269 MGRDDD CLLPVEEAG I IWDS ICFFFLLLQRRVFL 1270 MDRDQD CLLPVEEAG I IWDS ICFFFLLLQRRVFL	SQEPDYVSRYLEAEQII	KAARKTEQLQQ IREAEEKKROR -NLOVEKMI CONEQCKAKEND IRRTEA IRERYOKO LERG RHDHEKQVLHKIRRKMER IRAT - QQ MML RLEEEKKSMEQLKROMDRIKTH - QQ KFKRGI RIEEEKKSMDQLKROMDRIKAR - QQ KYKKGI RIEEEKKSMDQLKROMDRIKAR - QE KYKGI ROOSENSTOOLEESMIRIKGI - QE KYROS HRQLEERSLAQLKROMERIRAK - QE KYROS HRQLEEKSLAQLKROMERIRAK - QE KYROS HRKAEEKSLAQLKROMERIRAK - QE KHROSI HRRLEEKSLAQLKROMERIRAK - QE KHROSI HRRLEEKSLAQLKROMERIRAK - QE KHROSI HRRLEEKSLAQLKROMERIRAK - QE KHROSI		SDSNFGVASPRTEGLRRRKSPYL IPDSGAA DDPFPYYDLR ISSQDTENE	SPE ID GVVHRKEEOP IDED SQYEFE KRAGDYM FKYDPENDDLVEFVDSFV PEVDPK TRAGDYM FKYDPENDDLVEFVDSFV PEVDPK TRAGDYM FE MDDKF ELDL IHDE IDFLEEEN IT VRSGDYLFETDSEEBEEBEKKKE DEEPPK VRSGDYLFETDSEEBEEBEKKKE DEEPPR LHSGOYFLFETDSEEBEEBEKKKE DEEPPR LHSGOYFLFESDSEEBEEBEKKE	AHLEPP	VSTTPEALDSPEYSFGASPCE PPGQ IMMAA -TAHDLDLAKTVQQVK RRKTLYDK -SKDAPTGEFPSTSKG RAKKFYYHT -WIAESKAALKERGKG RAKKFLYOA -WITDPKTALRQRRKE FYYOA -WITDPKTALRQRRKE FYYOA -WITDPKTALRQRRKE FYYOA -WITDPKTALRQRRKE FYYOA -WITDPKTALRQRRKE FYYOA -WITDPKTALRQRHKE	ITE -VQQDLD		SEG KENPL ISAVQL IGDGVSQVQ PINKD	I TOKM IASA 1945 I TRIL - EGF PL1557 TWAL FLAT TIG59 TWVLF LAT V1667 TWVLF LAT V1686 TWVLF LAT V1686 TWVLF LAT V1660 TWVLF LAT V1661 LWVLF LAM V1529 LWVLL LAM V1511 LWVLG Q AT V1502 LWVLG Q AT V1502 LWVLG Q AL V1502 LWVLG Q AL V1502
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Zebrafish_Z/1-2955 Prog_2/1-2797 Mouse_2/1-2824 Rat_2/1-2833 Dog_2/1-2833 Luman_2/1-2752 Macaca_2/1-2753 Zebrafish_1/1-2538 Prog_1/1-2474 Rat_1/1-2535 Mouse_1/1-2546 Dog_1/1-2513 Macaca_1/1-2431	L808 NQLLRLVHNERCEKGNPDLCPYSSRVHVQS IERS L205 GTSGGE IV IPSDPNAVS	ENSTTESEVPOKSKREM IMEK IREQL IKAKAFT IF -QKGSS IPS IKLKSRKEL ILEKLREQL IKAKAFT IF -QKGSS VLS IKQKSKRELYMEKLQEHL IKAKAFT IF -CKGSS VLS IKQKSKRELYMEKLQEHL IKAKAFT IFKEKSLDVOKK -KKGRVALRVK IMGMKMQOFFAKKEKSLDVOKK -KKGRVALRVK IMGMKMQOFFAKVVASRRE -KWSRPERMKAAGRRLQSFCVSVVASRRE -KWSRPERMTAMGLRLQTFCLFEEEKEAPTGREK -RPSRAGRRVRVAGRQLQGFCLSEEEKEAPTGREK -RPSRSGGRVRAAGRRLQGFCLS	RLVEFYQP TRQ	EYSAVTDVYVLMFLADTVDFIIIVFCEYSAVTDVYVLMFLADTVDFIIIVFCDYSAVTDVYVLMFLADTVDFIIIVFCDYSAVTDVYVLMFLADTVDFIIIVFCDYSAVTDVYVLMFLADTVDFVIIIVFCEYSAVTDVYVLMFLADTVDFVIIIVFCEYSAVTDVYVLMFLADTVDFIIIVFCEYRAXTDVYALMFLADTVDFIIIVFCKYRAATDVYALMFLADVDDFIIIVFCKYRAATDVYALMFLADIVDIVIIIFCKYRAATDVYALMFLADIVDIVIIIFCKYRAATDVYALMFLADIVDIVIIIFCKYRAATDVYALMFLADVVDFIIIIFCKYRAATDVYALMFLADVVDFIIIIFC	FWA F G K H O G G AD ITSS L S E D O V P G P F I S F W A F G K H S A A AD ITSS L S E D O V P G A F I S F W A F G K H S A A AD ITSS L S E D O V P G P F I S F W A F G K H S A A AD ITSS L S E D O V P G P F I S F W A F G K H S A A AD ITSS L S E D O V P G P F I S F W A F G K H S A A AD ITSS L S E D O V P G P F I S F W A F G K H S A A AD IASS L S E D O V P G A P I S F W A F G K H S A A AD IASS L S D D O V P G A P I S F W A F G K H S A A AD IASS L S D D O V P G A P I S F W A F G K H S A A T D IASS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A A T D ITSS L S D D O V P G A P I S F W A F G K H S A T D ITSS L S D D O V P G A P I S F W A F G K H S A T D ITSS L S D D O V P G A P I S F W A F G K H S A T D ITSS L S D D O V P G A P I S F W A F G K H S A T D ITSS L S D D O V P G A P I S F W A F G K H S A T D ITSS L S D D O V P G A P I S F W A F G K H S A T D ITSS L S D D O V P G A P I S F W A F G K H S A T D ITSS L S D D O V P G A P I S F W A F G K M S A T D ITSS L S D D O V P G A P I S F W A F G K M S A T	VMVL 10 FGTMVVDRALYLRKTVVGKV IFQV VMVL 10 FGTMVVDRALYLRKTVMGKV IFQV VMVL 10 FGTMVVDRALYLRKTVLGKV IFQV VMVL 10 FGTMVDRALYLRKTVLGKV IFQV VMVL 10 FSTM IDRALYLRKTVLGKL IFQV FMLLVQFGTMV IDRALYLRKTVLGKL AFQV VMLL 10 FSTMV IDRALYLRKTVLGKL AFQV	ILUFG IHFWMFF ILEGITERRESONTIAOLWYFV ILVFG IHFWMFF ILEGVTERKESONTVAOLWYFV ILVFG IHFWMFF ILEGVTERKESONLVAOLWYFV ILVFG IHFWMFF ILEGVTERMENONTVAOLWYFV VLVVA IHLWMFF ILEGAVTERMENONAVAOLWYFV VLVVA IHLWMFF ILEGAVTERMESONAVAOLWYFV VLVVA IHLWMFF ILEGAVTERMESONAVAOLWYFV VLVVA IHLWMFF ILEGAVTERMESONVAOLWYFV VLVVA IHLWMFF ILEGAVTERMESONVAOLWYFV VLVA IHLWMFF ILEGAVTERMESONVAOLWYFV VLVA IHLWMFF ILEGAVTERMESONVAOLWYFV VLVA IHLWMFF ILEGAVTERMESONVAOLWYFV VLVA IHLWMFF ILEGAVTERMESONVAOLWYFV	CCIYFGLSAYO IRCGYPTR LIGN CCYYFGLSAYO IRCGYPTR VLGN CCYYFGLSAYO IRCGYPTR LIGN CCIYFTLSAYO IRCGYPTR LIGN CCIYFALSAYO IRCGYPTR LIGN CCIYFALSAYO IRCGYPTR LIGN CCIYFALSAYO IRCGYPTR LIGN CCIYFALSAYO IRCGYPTR LIGN CCIYFSLSAYO IRCGYPTR LIGN CCIYFSLSAYO IRCGYPTR LIGN CCIYFALSAYO IRCGYPTR LIGN CCIYFALSAYO IRCGYPTR LIGN CCIYFALSAYO IRCGYPTR LIGN	FITKSYNYANLFLFOGFRLVFFITELR. FLTKSYNYVNLFLFOGFRLVFFITELR. FLTKSYNYVNLFLFOGFRLVFFITELR. FLTKSYNYVNLFLFOGFRLVFFITELR. FLTKSYNYVNLFLFOGFRLVFFITELR. FLTKSYNYVNLFLFOGFRLVFFITELR. FLTKSYNYVNLFLFOGFRLVFFITELR. FLTKSYNYVNLFLFOGFRLVFFIVELR. FLTKKYNHLNLFLFOGFRLVFFIVELR. FLTKKYNHLNLFLFOGFRLVFFIVELR. FLTKKYNHLNLFLFOGFRLVFFIVELR. FLTKKYNHLNLFLFOGFRLVFFIVELR. FLTKKYNHLNLFLFOGFRLVFFIVELR.	AVMOMVATOTTLSLSSWICVEDIYAH IF II AVMOMVATOTTLSLSSWICVEDIYAN IF II	KCWRESEKRYPOPRGOKKKVVWYYGMGOM KCWRESEKRYPOPRGOKKKKVVWYYGMGOM KCWRESEKRYPOPRGOKKKAVKYVKYGMGOM KCWRESEKRYPOPRGOKKKAVKYYGMGOM KCWRESEKRYPOPRGOKKKVVKYYGMGOM KCWRESEKRYPOPRGOKKKVVWYYGMGGOM KCWRESEKRYPOPRGOKKKVVWYYGMGGOM KCWRESEKRYPOPRGOKKKVVWYYGMGGOM KCWRESEKRYPOPRGOKKKIVKYYGMGGI KCSRETEKKYPOPKGOKKKIVYYYGMGGI KCSRETEKKYPOPKGOKKKKIVKYGMGGI KCSRETEKKYPOPKGOKKKKIVWYGMGGI	M IVLL IC 12622 M IVLL IC 12466 M IVLL IC 12486 M IVLL IC 12496 M IVLL IC 12496 M IVLL IC 12496 M IVLL IC 12416 M IVLL IC 12416 L ILFL IC 12201 L IVFL IC 1213 L IVFL IC 1213 L IVFL IA 12190 L ILFL IA 12201 L ILFL IA 12207
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Zebrafish_2/1-2955 Prog_2/1-2797 Mouse_2/1-2824 Rat_2/1-2833 Dog_2/1-2833 2 Human_2/1-2752 Macaca_2/1-2753 Zebrafish_1/1-2538 Prog_1/1-2474 Rat_1/1-2535 Mouse_1/1-2546 Dog_1/1-2513 Macaca_1/1-2431	2377 FS IWGLY ITFVLAVGR -FIRLOCSDLRMR IPYEN L781 G GV IAVYLSV ILVVGRGLVRG IFTTSPSTVMFTE 5508 GS I IGLYTTFVLLASR -FMKSF IGGONK INFED 2871 YG IMGLYASVVLV IGK -FVREFFSG ISHS IMFEE 2713 YG IMGLYASVVLV IGK -FVREFFSG ISHS IMFEE 2740 YG IMGLYASVVLV IGK -FVREFFSG ISHS IMFEE 2749 YG IMGLYASVVLV IGK -FVREFFSG ISHS IMFEE 2749 YG IMGLYASVVLV IGK -FVREFFSG ISHS IMFEE 2749 YG IMGLYASVVLV IGK -FVREFFSG ISHS IMFEE 2745 YG IMGLYASVVLV IGK -FVREFFSG ISHS IMFEE 2745 YG IMGLYASVVLV IGK -FVREFFSG ISHS IMFEE 2455 YG IMGLYASVVLV IGK -FVRCFFSE ISHS IMFEE 2452 YG IMGLYVS IVLV IGK -FVRCFFSE ISHS IMFEE 2463 YG IVGLYVS IVLV IGK -FVRCFFSE ISHS IMFEE 2430 YG IMGLYVS IVLV IGK -FVRCFFSE ISHS IMFEE 2438 YG IMGLYVS IVLV IGK -FVRCFFSE ISHS IMFEE	LPNVDR ILKLCTD IFLVRETGELDLEEDLYAKL IE LPNVDR ILKLCTD IFLVRETGELELEEDLYAKL IE LPCADR ILKLCMD IFLVRETGELELEEDLYAKL IE LPCVDR ILKLCQD IFVVRETGELELEEBLYAKL IE LPCVDR ILKLCQD IFLVRETRELELEEBLYAKL IE	LYRSPETM IKWTREKSE LYRSPETM IKWTREKTH LYRSPETM IKWTREKHH LYRSPETM IKWTREKE LYRSPETM IKWTREKE LYRSPETM IKWTREKE LYRSPETM IKWTREKE									2462 1869 2621 2955 2797 2824 2833 2752 2753 2538 2474 2535 2546 2513 2431 2521