Ohana et al., http://www.jgp.org/cgi/content/full/jgp.201010531/DC1

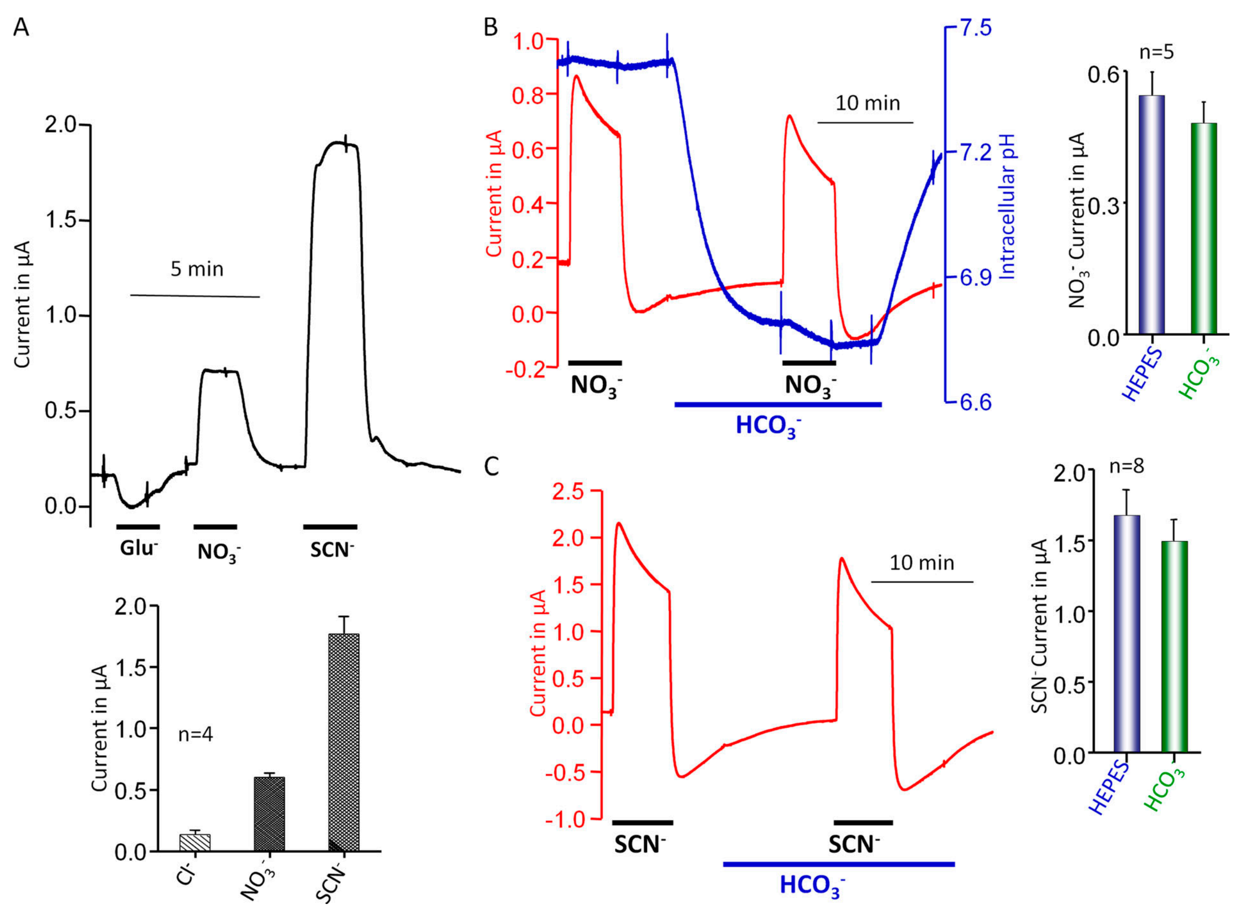

Figure S1. The Slc26a6-mediated currents in the presence and absence of HCO_3^-. (A) Slc26a6-expressing oocytes in HEPES-buffered medium were incubated in the absence of Cl^-_o that reduced the outward Cl^- current. The same oocytes were then incubated with NO_3^- and SCN^-. The columns show the mean ± SEM of the current mediated by each anion in four similar experiments. (B) The current and pH_i were measured in HEPES- and then in HCO_3^--buffered media upon replacing Cl^-_o with NO_3^-. The columns show the mean ± SEM of the current in each media in five similar experiments. (C) The SCN^- current was measured in HEPES- and then in HCO_3^--buffered media. The columns show the mean ± SEM of the current in each media in eight similar experiments.

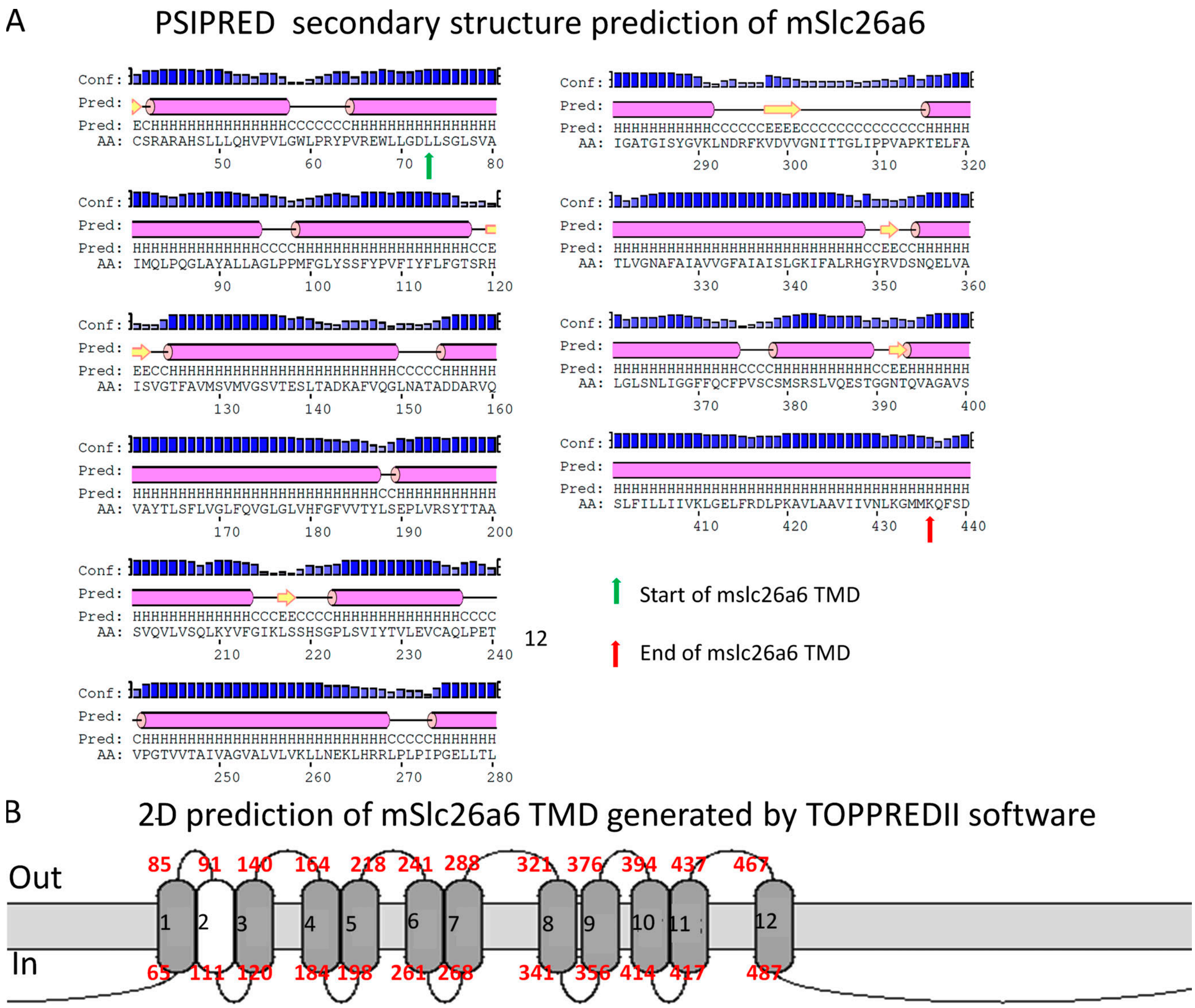

Figure S2. The predicted secondary structure of Slc26a6. The PSIPRED secondary structure prediction software was used to predict the location of α helices within the Slc26a6 sequence (A). The prediction for the region encompassing residues 41–440 indicated 13 helices, 12 of which were predicted by 3D-Jury as the TMDs (see Fig. 2) between L73 (green arrow) to K436 (red arrow). Additionally, the Top-Pred II software was used to describe the 2-D transmembrane span of Slc26a6 (B). The position of the 12-transmembrane spanning segment start and end residues is indicated in red.

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SLC26A8_H.sapiens        352 SLLPKIILQAFSLSLVSSFLLIFLGKKIASLHNYSVNSNQDLIAIGLCNVVSSFFRSCVFTGAIARTIIQDKSGGRQQFA
SLC26A8_M.musculus       352 SLLPKIILQAFSLSLVSSFLLIFLGKKIASLHNYSVNSNQDLIAIGLCNVVSSFFRSCVFTGAIARTIIQDKSGGRQQFA
SLC26A3_M.musculus       327 EVFQDTIGDSFGIAIVGFAVAFSVASVYSLKYDYPIDGNQELIALGVSNIFTGAFKGFAGSTALSRSGVQESTGGKTQVA
SLC26A3_R.norvegicus     327 EVFQDTIGDCFGIAIVGFAVAFSVASVYSLKYDYPIDGNQELIALGVSNIFTGAFKGFAGSTALSRSGVQESTGGKTQVA
SLC26A3_O.cuniculus      326 QVFQDAIGDCFTIAIVGFVVAFSVASVYSLKYDYRIDGSQELIAFGLGNIVTGSFKGFAGSTALSRSAVQESTGGKTQVA
SLC26A3_H.sapiens        334 ETFQNTVGDCFGIAMVAFAVAFSVASVYSLKYDYPLDGNQELIALGLGNIVCGVFRGFAGSTALSRSAVQESTGGKTQIA
SLC26A4_M.musculus       344 GLFSDMLAASFSIAVVAYAIAVSVGKVYATKHDYVIDGNQEFIAFGISNVFSGFFSCFVATTALSRTAVQESTGGKTQVA
SLC26A4_R.norvegicus     344 GLFSDMLAASFSIAVVAYAIAVSVGKVYATKHDYIIDGNQEFIAFGISNVFSGFFSCFVATTALSRTAVQESTGGKTQVA
SLC26A4_H.sapiens        344 SLFSEMLAASFSIAVVAYAIAVSVGKVYATKYDYTIDGNQEFIAFGISNIFSGFFSCFVATTALSRTAVQESTGGKTQVA
SLC26A4_X.leavis         328 SLFSSLISSAFSTGIVAYAIVISVGKVYGTKNNYRVDGNQEFIAYGISNMFGGIFSCFCASTALSRTAIQEGTGGKSQIA
SLC26A3_X.leavis         348 SMFPQIISSAISIGIVAYAVAVSLGKVFATKYNYAIDGNQEFVAFGVSNIFSGFFSCFCATTALSRTAIQESTGGKTQIA
SLC26A4_D.rerio          184 ----------------------------------------ELIAFGVSNIFGGCFSSFVASTALSRTAVQESTGGKSQVA
SLC26A5_M.unguiculatus   334 SLFHLVYVDAIAIAIVGFSVTISMAKTLANKHGYQVDGNQELIALGICNSIGSLFQTFSISCSLSRSLVQEGTGGKTQLA
SLC26A5_M.musculus       334 SLFHLVYVDAIAIAIVGFSVTISMAKTLANKHGYQVDGNQELIALGICNSIGSLFQTFSISCSLSRSLVQEGTGGKTQLA
SLC26A5_H.sapiens        334 SLFHLVYVDAIAIAIVGFSVTISMAKTLANKHGYQVDGNQELIALGLCNSIGSLFQTFSISCSLSRSLVQEGTGGKTQLA
SLC26A5_D.rerio          337 SVFPNLFADAVPIAVVGFSITISLAKTFALKYGYSVDGNQELIALGLCNFVSSFFHTFVVTASMSRSLVQESTGGHTEIA
SLC26A6_H.sapiens        318 QLFSKLVGSAFTIAVVGFAIAISLGKIFALRHGYRVDSNQELVALGLSNLIGGIFQCFPVSCSMSRSLVQESTGGNSQVA
SLC26A6_S.scrofa         340 QLFARLVGNAFAIAVVGFAIAISLGKIFALRHGYRVDSNQELVALGLSNFIGGIFQCFPVSCSMSRSLVQESTGGNTQVA
SLC26A6_M.musculus       317 ELFATLVGNAFAIAVVGFAIAISLGKIFALRHGYRVDSNQELVALGLSNLIGGFFQCFPVSCSMSRSLVQESTGGNTQVA
SLC26A6_X.laevis         336 NIFARVVGNAFAIAVVVYAFTISLAKMFGVKHGYNIDSNQELIALGLSNSIGSFFQCFTIGTAMSRSLVQESTGGHSQVA
SLC26A6_A.japonica       328 SIFTEVIGDAFAMAVVGYAINISLGKTFALKHGYKVDSNQELVALGLSNTVGGFFQCYCVTSSMSRSLVQETTGGKTQVA
SLC26A9_H.sapiens        328 SQWKDMIGTAFSLAIVSYVINLAMGRTLANKHGYDVDSNQEMIALGCSNFFGSFFKIHVICCALSVTLAVDGAGGKSQVA
SLC26A9_M.musculus       328 SQWKGMVGTAFSLAIVGYVINLAMGRTLASKHGYDVDSNQEMIALGCSNFFGSFFKIHVICCALSVTLAVDGAGGKSQVA
SLC26A2_H.sapiens        377 NLIPSVAVDAIAISIIGFAITVSLSEMFAKKHGYTVKANQEMYAIGFCNIIPSFFHCFTTSAALAKTLVKESTGCHTQLS
SLC26A2_E.caballus       379 NLIPSVAVDAIAISIIGFAITVSLSEMFAKKHGYTVKANQEMYAIGFCNIIPSFFHCFTTSAALAKTLVKESTGCQSQLS
SLC26A2_B_bubalis        372 NLIPRVAIDAIAIAIIGFAITVSLSEMFAKKHGYTVKANQEMYAIGFCNIIPSFFHCFTTSAALAKTLVKESTGCQTQVS
SLC26A2_B_taurus         372 NLIPRVAVDAIAIAIIGFAITVSLSEMFAKKHGYTVKANQEMYAIGFCNIIPSFFHCFTTSAALAKTLVKESTGCQTQVS
SLC26A2_M.musculus       377 SLIPNVAVDAIAISIIGFAITVSLSEMFAKKHGYTVKANQEMYAIGFCNIIPSFFHCITTSAALAKTLVKESTGCQTQLS
SLC26A2_R.norvegicus     377 SLIPNVAVDAIAISIIGFAITVSLSEMFAKKHGYTVKANQEMYAIGFCNIIPSFFHCITTSAALAKTLVKESTGCQTQLS
SLC26A2_C.intestinalis   368 SIMGSIIGDGFALAVVGFAISVSLSKMYAQKYGYSIDSNQELIAYGVSNAIPSFFRCFPNAAALARCVIQENTGGNTQLV
SLC26A10_H.sapiens       274 AELPRILADSLPIALVSFAVSASLASIHADKYSYTIDSNQEFLAHGASNLISSLFSCFPNSATLATTNLLVDAGGKTQLA
SLC26A10_D.rerio         257 ETVPEIAGDTVAITLVAYAVSVSLAMIYADKHGYSIDPNQELLAHGISNTVSSLFTCFPNSATLATTNILESAGGHTQLA
SLC26A7_H.sapiens        303 NILSAVITEAFGVALVGYVASLALAQGSAKKFKYSIDDNQEFLAHGLSNIVSSFFFCIPSAAAMGRTAGLYSTGAKTQVA
SLC26A7_M.musculus       303 NILSAVLTEAFGVALVGYVASLALAQGSAKKFKYSVDDNQEFLAHGLSNVIPSFLFCIPSAAAMGRTAGLYSTGAKTQVA
SLC26A5_C.intestinalis   343 DKFSTIIGHAIPIAIVGYSVAVSIAKIFANNFGYKIRPNQELVAFGASNLVSSFFFCFPAFPSMSRSCVQVDSGGKTQLV
SLC26A11_H.sapiens       301 EMVQDMGAGLAVVPLMGLLESIAVAKASASQNNYRIDANQELLAIGLTNMLGSLVSSYPVTGSFGRTAVNAQSGVCTPAG
SLC26A11_B.taurus        297 EMVQGMGAGLVVVPLMGLLESIAVAKSFASQNNYRINSNQELLALGFTNILGSLFSSYPVTGSFGRTAVNAQSGVCTPAG
SLC26A11_M.musculus      322 EMVQDMGAGLAVVPLMGLLESIAVAKSFASQNNYRIDANQELLAIGLTNVLGSLVSSYPVTGSFGRTAVNAQTGVCTPAG
SLC26A11_D.rerio         283 DIAKDLGGGLAVIPLMGVLESIAIAKAFGSKNNYRIDANQELFAIGLTNIMGSFVSAYPVTGSFGRTAVNSQTGVCSPAG
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Figure S3. The SLC26 transporters conserved Glu$^-$. A multiple sequence alignment of Slc26a2-Slc26a11 reveals conservation of the Glu$^-$ among Slc26 transporters in species from human to *Xenopus*. Only in SLC26A8 is the Glu$^-$ (red) replaced by another negatively charged residue, Asp$^-$ (yellow).