

H.sapiens_SLC39A13_zinc_transporter_ZIP13_isoform_X1
S.salar_slc39a13_zinc_transporter_ZIP13_precursor
S.townsendi_SLC39A7_zinc_transporter_SLC39A7
S.purpuratus_LOC582713_protein_catecholamines_up
G.aculeatus_slc39a13_zinc_transporter_ZIP13_isoform_X2
S.salar_slc39a7_zinc_transporter_Slc39a7
S.townsendi_SLC39A13_zinc_transporter_ZIP13
S.kowalevskii_LOC100372977_PREDICTED_LOW_QUALITY_PROTEIN_zinc_tra
C.carpio_LOC109093802_zinc_transporter_ZIP13like_isoform_X1
G.gangeticus_SLC39A13_PREDICTED_zinc_transporter_ZIP13
X.laavis_slc39a7_s_zinc_transporter_SLC39A7_isoform_X1
C.carpio_LOC109056796_zinc_transporter_Slc39a7
C.carcharias_LOC121291098_zinc_transporter_SLC39A7like_isoform_X2
D.erio_slc39a7_zinc_transporter_Slc39a7_precursor
F.catus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
S.purpuratus_LOC584043_zinc_transporter_ZIP13_isoform_X1
D.erio_slc39a13_zinc_transporter_ZIP13
X.laavis_slc39a13.S_zinc_transporter_ZIP13
E.caballus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
X.laavis_slc39a7_L_solute_carrier_family_39_member_7_L_homeolog_1
S.canicula_slc39a13_zinc_transporter_ZIP13
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.mydas_SLC39A13_zinc_transporter_ZIP13
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.mydas_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
E.caballus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
B.belcheri_LOC109482456_PREDICTED_protein_catecholamines_uplike
F.catus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
S.salar_LOC106563524_zinc_transporter_ZIP13_isoform_X2
C.carpio_LOC109094209_zinc_transporter_ZIP13_isoform_X1
S.kowalevskii_LOC102808884_PREDICTED_zinc_transporter_ZIP13like
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.carpio_LOC109044923_zinc_transporter_Slc39a7like_isoform_X2
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
S.salar_ke4_zinc_transporter_SLC39A7_precursor
X.laavis_slc39a13.L_zinc_transporter_ZIP13_isoform_X1
C.carcharias_slc39a13_zinc_transporter_ZIP13
G.gallus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
B.belcheri_LOC109463185_PREDICTED_LOW_QUALITY_PROTEIN_zinc_transp
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
P.marinus_SLC39A13_NA
S.canicula_slc39a7_zinc_transporter_Slc39a7_isoform_X1
P.marinus_SLC39A7_NA

H.sapiens_SLC39A13_zinc_transporter_ZIP13_isoform_X1
S.salar_slc39a13_zinc_transporter_ZIP13_precursor
S.townsendi_SLC39A7_zinc_transporter_SLC39A7
S.purpuratus_LOC582713_protein_catecholamines_up
G.aculeatus_slc39a13_zinc_transporter_ZIP13_isoform_X2
S.salar_slc39a7_zinc_transporter_Slc39a7
S.townsendi_SLC39A13_zinc_transporter_ZIP13
S.kowalevskii_LOC100372977_PREDICTED_LOW_QUALITY_PROTEIN_zinc_tra
C.carpio_LOC109093802_zinc_transporter_ZIP13like_isoform_X1
G.gangeticus_SLC39A13_PREDICTED_zinc_transporter_ZIP13
X.laavis_slc39a7_s_zinc_transporter_Slc39a7_isoform_X1
C.carpio_LOC109056796_zinc_transporter_Slc39a7
C.carcharias_LOC121291098_zinc_transporter_SLC39A7like_isoform_X2
D.erio_slc39a7_zinc_transporter_Slc39a7_precursor
F.catus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
S.purpuratus_LOC584043_zinc_transporter_ZIP13_isoform_X1
D.erio_slc39a13_zinc_transporter_ZIP13
X.laavis_slc39a13.S_zinc_transporter_ZIP13
E.caballus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
X.laavis_slc39a7_L_solute_carrier_family_39_member_7_L_homeolog_1
S.canicula_slc39a13_zinc_transporter_ZIP13
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.mydas_SLC39A13_zinc_transporter_ZIP13
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.mydas_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
E.caballus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
B.belcheri_LOC109482456_PREDICTED_protein_catecholamines_uplike
F.catus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
S.salar_LOC106563524_zinc_transporter_ZIP13_isoform_X2
C.carpio_LOC109094209_zinc_transporter_ZIP13_isoform_X1
S.kowalevskii_LOC102808884_PREDICTED_zinc_transporter_ZIP13like
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.carpio_LOC109044923_zinc_transporter_Slc39a7like_isoform_X2
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
S.salar_ke4_zinc_transporter_SLC39A7_precursor
X.laavis_slc39a13.L_zinc_transporter_ZIP13_isoform_X1
C.carcharias_slc39a13_zinc_transporter_ZIP13
G.gallus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
B.belcheri_LOC109463185_PREDICTED_LOW_QUALITY_PROTEIN_zinc_transp
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
P.marinus_SLC39A13_NA
S.canicula_slc39a7_zinc_transporter_Slc39a7_isoform_X1
P.marinus_SLC39A7_NA

100Å 120Å 140Å 160Å 180Å

H.sapiens_SLC39A13_zinc_transporter_ZIP13_isoform_X1
S.salar_slc39a13_zinc_transporter_ZIP13_precursor
S.townsendi_SLC39A7_zinc_transporter_SLC39A7
S.purpuratus_LOC582713_protein_catecholamines_up
G.aculeatus_slc39a13_zinc_transporter_ZIP13_isoform_X2
S.salar_slc39a7_zinc_transporter_Slc39a7
S.townsendi_SLC39A13_zinc_transporter_ZIP13
S.kowalevskii_LOC100372977_PREDICTED_LOW_QUALITY_PROTEIN_zinc_tra
C.carpio_LOC109093802_zinc_transporter_ZIP13like_isoform_X1
G.gangeticus_SLC39A13_PREDICTED_zinc_transporter_ZIP13
X.laavis_slc39a7_s_zinc_transporter_SLC39A7_isoform_X1
C.carpio_LOC109056796_zinc_transporter_Slc39a7
C.carcharias_LOC121291098_zinc_transporter_SLC39A7like_isoform_X2
D.erio_slc39a7_zinc_transporter_Slc39a7_precursor
F.catus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
S.purpuratus_LOC584043_zinc_transporter_ZIP13_isoform_X1
D.erio_slc39a13_zinc_transporter_ZIP13
X.laavis_slc39a13.S_zinc_transporter_ZIP13
E.caballus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1

g--h-shedmh--hghsha--hd--e--hed-iwgha-hedphgh--shshv--
sh--ggqklh--gqaskw--saealnpp--aee-shgha-h--dhgha--
shd-h-gdhhihdghsg-ddiaaakrsysraaqehghshg--gaeph--dhtnhghgh--d--sed--hhghs-h--gse-dhghs--
sha--h--hghshg--hhghgh--s--hhghdchghg-h--sh--qghs--
sh--ggvkmh--hgaskw--saealnph--aee-ehghv-h--dhd--
shd-hhghshdh--hghshd--h-hgh--s--hd--hhghs-h--dq--hghs--
sh--ggakmh--hgaskw--saealnph--aee-ehhvhd-h--ght--
shr-r-sqedfh--hghsha--hghgh--t--hes-iwght-h--gh--ehghs--
shr-h-shedfh--hghsha--h-gh-t--hes-iwght-h--gh--dhghs--

H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor shr-h-shedfh-----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
X.laevis_slc39a7.L.solute_carrier_family_39_member_7_L_homeolog_1 sha-----h-----hghshg-----hhghgh-s--hghdchghg-h--sh--hghs-----
S.canicula_slc39a13_zinc_transporter_ZIP13 -----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor shr-h-shedfh-----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
C.mydas_SLC39A13_zinc_transporter_ZIP13 -----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor shr-h-shedfh-----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
C.mydas_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 shagh-shedih-----hghsha-----gh-s--hed-lhghs-h--aghs-----
E.caballus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
B.belcheri_LOCI09482456_PREDICTED_protein_catecholamines_uplike de-p-thehfy-----hgssyq-----eeegh--dheheh-hdhghh-h--hh--dhdm-----
F.catus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 rgr-h-cspre-----aaaagaaspatqclavpagpppprp--agaerlapgaptsgag-----pppppi-----lpggsapppp-----
S.salar_LOCI06563524_zinc_transporter_ZIP13_isoform_X2 -----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
C.carpio_LOCI09094209_zinc_transporter_ZIP13_isoform_X1 -----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
S.kowalevskii_LOCI02808884_PREDICTED_zinc_transporter_ZIP13like shr-h-shedfh-----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor sh-----ggakmh-----hgaskw-----saealnp--aee-ehhdh-h--ghahdgh-----
C.carpio_LOCI09044923_zinc_transporter_Slc39a7like_isoform_X2 shr-h-shedfh-----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor sh-----gsqklh-----hgaskw-----saealnp--aes-shhgha-h--dhghk-----
S.salar_ke4_zinc_transporter_SLC39A7_precursor -----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
X.laevis_slc39a13.L_zinc_transporter_ZIP13_isoform_X1 -----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
C.carcharias_slc39a13_zinc_transporter_ZIP13 -----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
G.gallus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
B.belcheri_LOCI09463185_PREDICTED_LOW_QUALITY_PROTEIN_zinc_transp shr-h-shedfh-----hghsha-----hghgh-t--hes-iwght-h--dh--dhghs-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ssp-h-slppp-----dssd-aslpsasqvfpqssslspgsvkagpsvkavprtssdngsggh--k--dsq--cspss-h--daarqargrd-----
P.marinus_SLC39A13_NA shd-hhghshdh-----hghthg-g-----haghgh-t--hgqagghgh-h--gg--hag-----
S.canicula_slc39a7_zinc_transporter_Slc39a7_isoform_X1 -----h-ggq-ag-----220a-----240a-----260a-----280a-----
P.marinus_SLC39A7_NA -----h-ggq-ag-----220a-----240a-----260a-----280a-----
H.sapiens_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----sgp--al--rsrg--tat--a--c--r-ld-----
S.salar_slc39a13_zinc_transporter_ZIP13_precursor -----sga--am--a-hata--taag-----s--g--p-gl-----
S.townsendi_SLC39A7_zinc_transporter_SLC39A7 -----he-dph-hghshghenhhghghghgh-vhe--pahedphgh--hsh--vshkdh-h--s-hs-----
S.purpuratus_LOC582713_protein_catecholamines_up -----tes--gh--s-he-----a--t--g-pgp-----
G.aculeatus_slc39a13_zinc_transporter_ZIP13_isoform_X2 -----tqt--sm--a-ha--tas--a--t--g-pgp-----
S.salar_slc39a7_zinc_transporter_Slc39a7 -----hd-hahdghah-----dhg--sm--hdhg--hah--d--hghdhkeesg-hg-----
S.townsendi_SLC39A13_zinc_transporter_ZIP13 -----a-----a-----vvg-----a--p-lc-----
S.kowalevskii_LOCI00372977_PREDICTED_LOW_QUALITY_PROTEIN_zinc_tra -----hgsehd-hghshgs-----adnhgh-shg--sn--khgh--hsh--dsdghrghs--hgkl-----
C.carpio_LOCI09093802_zinc_transporter_ZIP13like_isoform_X1 -----aqt--av--a-gakt--apag-----p--g--p-wc-----
G.gangeticus_SLC39A13_PREDICTED_zinc_transporter_ZIP13 -----ahq--pt--gsha--vss--a--n--p-lc-----
X.laevis_slc39a7.S_zinc_transporter_SLC39A7_isoform_X1 -----he-dvh-hghsh-----qdhhgh-she--et--ghe--hsh--sd--k--e-gs-----
C.carpio_LOCI09056796_zinc_transporter_Slc39a7 -----hd-----hnhg--hah--d--h--g-ha-----
C.carcharias_LOCI21291098_zinc_transporter_SLC39A7like_isoform_X2 -----hg--h-hghshe--h-vdd--lt--ghsy--lhd--q--h--h--a-hs-----
D.rerio_slc39a7_zinc_transporter_Slc39a7_precursor -----hn-hahdghah-----shg--di--hdhg--hah--k--h--g-ha-----
F.catus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 -----he-dih-hghshg-----q-shg--tl--yhrq--hgh--d--h--e-hs-----
S.purpuratus_LOC584043_zinc_transporter_ZIP13_isoform_X1 -----rfs--rv--a-ra--tsk--a--y--p-gsegltvlg-----
D.rerio_slc39a13_zinc_transporter_ZIP13 -----igt--av--a-gakt--apag-----p-----c--pg-----
X.laevis_slc39a13.S_zinc_transporter_ZIP13 -----he-dih-hghshg-----h-she--nl--yhrq--hgh--d--h--e-hs-----
E.caballus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 -----he-dih-hghshg-----y-she--sl--yhrq--hgh--d--h--e-hs-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----he-dih-hghshvhhghshqdhghgh-she--ei--ghe--hsp--dh--k--e-gs-----
X.laevis_slc39a7.L.solute_carrier_family_39_member_7_L_homeolog_1 -----ark--aa--aaq--aaig--s--h--r-wc-----
S.canicula_slc39a13_zinc_transporter_ZIP13 -----he-dih-hghshg-----y-she--sl--yhrq--hgh--d--h--e-hs-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----age--lp--vgka--ttg--a--s--p-lc-----
C.mydas_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 -----he-dih-hghshg-----y-she--sl--yhrq--hgh--d--h--e-hs-----
E.caballus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----he-dih-hghsha-----hshs--he--dfhg--hgh--s--h--e-df-----
B.belcheri_LOCI09482456_PREDICTED_protein_catecholamines_uplike -----sqg--al--rnrq--aaa--a--c--r-ld-----
F.catus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----g-----spt--aa--rrkr--ast--a--a--p-ldpaarrag-----
S.salar_LOCI06563524_zinc_transporter_ZIP13_isoform_X2 -----sga--am--a-hata--taag-----s--g--l--l--a-----
C.carpio_LOCI09094209_zinc_transporter_ZIP13_isoform_X1 -----aqt--av--a-gakt--apag-----l--g--p-wc-----
S.kowalevskii_LOCI02808884_PREDICTED_zinc_transporter_ZIP13like -----y-she--sl--yhrq--hgh--d--h--e-hs-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ahdhghahdgh-hahdghah-----dhg--ha--hdhg--hah--d--hghth-----
C.carpio_LOCI09044923_zinc_transporter_Slc39a7like_isoform_X2 -----he-dih-hghshg-----y-she--sl--yhrq--hgh--d--h--e-hs-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----he-----e-sg-hg-----
S.salar_ke4_zinc_transporter_SLC39A7_precursor -----he-----e-sg-hg-----
X.laevis_slc39a13.L_zinc_transporter_ZIP13_isoform_X1 -----ark--aa--aaq--aavg--s--h--r-wc-----
C.carcharias_slc39a13_zinc_transporter_ZIP13 -----aqt--ga--p-taltvkhgpkgfiihlnksnp--y--g--hi-----
G.gallus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----q-qy-----q-ra--gle--s--t-----
B.belcheri_LOCI09463185_PREDICTED_LOW_QUALITY_PROTEIN_zinc_transp -----he-dih-hghshg-----y-she--sl--yhrq--hgh--d--h--e-hs-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----d-----ssq--ah--rkrq--fsg--a--a--p-ghgggrdemg-----
P.marinus_SLC39A13_NA -----hd--h-hghshd--h-vdd--lt--ghsy--pgd--h--h--g-hs-----
S.canicula_slc39a7_zinc_transporter_Slc39a7_isoform_X1 -----hghthgpg-----gggcph-ahapanpadk--yhkk--hye--t--a--k-tq-----
P.marinus_SLC39A7_NA -----hghthgpg-----gggcph-ahapanpadk--yhkk--hye--t--a--k-tq-----
H.sapiens_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----nk--e--s--e--s--wgai-lsgerldtwic-----
S.salar_slc39a13_zinc_transporter_ZIP13_precursor -----pdellg-----f--g--a-ladf-faseradwlc-----
S.townsendi_SLC39A7_zinc_transporter_SLC39A7 -----hga-----gg--p--sqpkp1lg--kppvrr-erlepqlwty-----
S.purpuratus_LOC582713_protein_catecholamines_up -----h-----h--s--h--a--estk-vkssegnvtd-----
G.aculeatus_slc39a13_zinc_transporter_ZIP13_isoform_X2 -----htq-----nl--a--d--c--l--qanv-fysehlhwll-----
S.salar_slc39a7_zinc_transporter_Slc39a7 -----gt-----gg--e-----rv--k--r--qaeq-ekrdilwlmq-----
S.townsendi_SLC39A13_zinc_transporter_ZIP13 -----ek--e--v--e--e--wgti-fseerldawic-----
S.kowalevskii_LOCI00372977_PREDICTED_LOW_QUALITY_PROTEIN_zinc_tra -----rdelpm-----p--s--k--agnn-kkadftfmwle-----
C.carpio_LOCI09093802_zinc_transporter_ZIP13like_isoform_X1 -----ikdlld-----lkl-fsldndldwvfc-----
G.gangeticus_SLC39A13_PREDICTED_zinc_transporter_ZIP13 -----ek--e--v--e--s--wgnl-fsgerldawic-----
X.laevis_slc39a7.S_zinc_transporter_SLC39A7_isoform_X1 -----hvv-----geertkreatgdn--l--i--h--n--hgr-ekmepqqlwty-----
C.carpio_LOCI09056796_zinc_transporter_Slc39a7 -----heh-----ga--e--gm--k--s--dvea-gkrnmvewlmq-----
C.carcharias_LOCI21291098_zinc_transporter_SLC39A7like_isoform_X2 -----qgy-----lk--ehegksrwtga--aaepvp-ggrr-evsnpvelwsg-----
D.rerio_slc39a7_zinc_transporter_Slc39a7_precursor -----hdh-----ga--e--ks--k--k-vvea-gkrnmvewlmq-----
F.catus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 -----hgg-----yg--e--s--g--g--a-pgik-qldtvtlway-----
S.purpuratus_LOC584043_zinc_transporter_ZIP13_isoform_X1 -----ddeg-----pvsdggre-----dl--e--t--d--d--ftn-naysqteawly-----
D.rerio_slc39a13_zinc_transporter_ZIP13 -----ikdlvd-----l--g--y--ldel-msidndldwvfc-----
X.laevis_slc39a13.S_zinc_transporter_ZIP13 -----sr-----acep-aslssvdawic-----
E.caballus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 -----hgg-----yg--e--s--g--a--pgik-qldtvtlway-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----hgg-----yg--e--s--g--a--pgik-qldtvtlway-----
X.laevis_slc39a7.L.solute_carrier_family_39_member_7_L_homeolog_1 -----hvv-----geertkreaptgdn--l--i--h--n--hsgk-ekmepqqlwty-----
S.canicula_slc39a13_zinc_transporter_ZIP13 -----penvfe-----l--r--s--wsel-fsgerldawic-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----hgg-----yg--e--s--g--a--pgik-qldtvtlway-----
C.mydas_SLC39A13_zinc_transporter_ZIP13 -----ek--e--v--e--e--wgti-fseerldawic-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----hgg-----yg--e--s--g--a--pgik-qldtvtlway-----
C.mydas_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 -----hgg-----yg--e--s--g--a--pgik-qldtvtlway-----
E.caballus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----hgsqadfdshgpegvrvphs-----aegsps-----h--g--q-lpgk-erqldlikwth-----
B.belcheri_LOCI09482456_PREDICTED_protein_catecholamines_uplike -----nhh-----nk--e--s--e--s--wgai-lsgerldtwic-----
F.catus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----sggvpcdvaalrgrlrag-----gr--a--a--d--r--agot-rggarrswwagaarsaa-----
S.salar_LOCI06563524_zinc_transporter_ZIP13_isoform_X2 -----pdeflg-----f--g--a--ladf-faseradwlc-----
C.carpio_LOCI09094209_zinc_transporter_ZIP13_isoform_X1 -----ikdlld-----l--g--y--ldel-fsldndldwvfc-----
S.kowalevskii_LOCI02808884_PREDICTED_zinc_transporter_ZIP13like -----hgg-----yg--e--s--g--a--pgik-qldtvtlway-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----hdh-----aa--e--e--r1--s--r--dvea-gkrnmvewlmq-----
C.carpio_LOCI09044923_zinc_transporter_Slc39a7like_isoform_X2 -----hgg-----yg--e--s--g--a--pgik-qldtvtlway-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----hth-----gg--e--r--r--aeg-ekrdilwlmq-----
S.salar_ke4_zinc_transporter_SLC39A7_precursor -----sr-----acep-aslssldawic-----
X.laevis_slc39a13.L_zinc_transporter_ZIP13_isoform_X1 -----penvfe-----l--r--s--wsel-fsgerldawic-----
C.carcharias_slc39a13_zinc_transporter_ZIP13 -----penvfe-----l--r--s--wsel-fsgerldawic-----

G.gallus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----pkpalphh
B.belcheri_LOCI09463185_PREDICTED_LOW_QUALITY_PROTEIN_zinc_transp -----r-----g-----d-----l-----s-----e-----d-----g-----g-----r-----p-----h-----w-----l-----y-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----s-----g-----a-----p-----g-----k-----q-----d-----l-----d-----a-----v-----t-----l-----w-----a-----y-----
P.marinus_SLC39A13_NA -----p-----p-----s-----p-----a-----s-----w-----l-----s-----d-----w-----d-----g-----r-----i-----g-----a-----w-----l-----
S.canicula_slc39a7_zinc_transporter_Slc39a7_isoform_X1 -----l-----k-----e-----q-----e-----g-----k-----s-----r-----w-----k-----q-----s-----a-----t-----p-----e-----g-----t-----a-----v-----s-----n-----p-----f-----l-----w-----a-----q-----
P.marinus_SLC39A7_NA -----q-----q-----q-----g-----g-----e-----e-----l-----h-----a-----p-----e-----r-----r-----d-----v-----a-----t-----v-----m-----q-----
400Å 420Å 440Å 460Å 480Å
H.sapiens_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----sllgslmvlgsgvfpflviplemgtm-----
S.salar_slc39a13_zinc_transporter_ZIP13_precursor -----sllgsvavgtgfgflvipieagea-----
S.townsendi_SLC39A7_zinc_transporter_SLC39A7 -----aigatl1isaapcylflipvesnns-----
S.purpuratus_LOC582713_protein_catecholamines_up -----aigatv1isaapfvflfvlpdkgre-----
G.aculeatus_slc39a13_zinc_transporter_ZIP13_isoform_X2 -----slvgsvavlgsgifflvipieagaa-----
S.salar_slc39a7_zinc_transporter_Slc39a7 -----aigatl1isaapfvflfvlpvqsntd-----
S.townsendi_SLC39A13_zinc_transporter_ZIP13 -----slvgsvvvglsqvlplliipiesgaa-----
S.kowalevskii_LOCI00372977_PREDICTED_LOW_QUALITY_PROTEIN_zinc_tra -----algstv1isaapfvflfvlpigqnta-----
C.carpio_LOCI09093802_zinc_transporter_ZIP13like_isoform_X1 -----slvgsvaiglgsgifflvipieagtt-----
G.gangeticus_SLC39A13_PREDICTED_zinc_transporter_ZIP13 -----sligsvmvlgsgvflvipletgat-----
X.laavis_slc39a7_S_zinc_transporter_SLC39A7_isoform_X1 -----aicat11isaapfvflfvlpvqsnns-----
C.carpio_LOCI09056796_zinc_transporter_Slc39a7 -----aigatl1isaapfvflfvlpvqsntd-----
C.carcharias_LOCI21291098_zinc_transporter_SLC39A7like_isoform_X2 -----aigatv1isaapfvflfvlpvesnts-----
D.erio_slc39a7_zinc_transporter_Slc39a7_precursor -----aigatl1isaapfvflfvlpvqsntd-----
F.catus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 -----aigatv1isaapfvflfvlpvesnsp-----
S.purpuratus_LOC584043_zinc_transporter_ZIP13_isoform_X1 -----algstv1vglsqvlplf-----lplielops-----
D.erio_slc39a13_zinc_transporter_ZIP13 -----slvgsvaiglgsgifflvipieagta-----
X.laavis_slc39a13_S_zinc_transporter_ZIP13 -----sligslvlgsgvfpflvipieagaa-----
E.caballus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 -----aigatv1isaapfvflfvlpvesnsp-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----aigatv1isaapfvflfvlpvesnsp-----
X.laavis_slc39a7_L_solute_carrier_family_39_member_7_L_homeolog_i -----aicat11isaapfvflfvlpvqsnns-----
S.canicula_slc39a13_zinc_transporter_ZIP13 -----sligsvlglgsgifflvipieagaa-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----aigatv1isaapfvflfvlpvesnsp-----
C.mydas_SLC39A13_zinc_transporter_ZIP13 -----sligsvmvlgsgvfpflvvpлетga-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----aigatv1isaapfvflfvlpvesnsp-----
C.mydas_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 -----aigatl1isaapfvflfvlpvesnts-----
E.caballus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----sllgslmvlgsgvfpflviplemgtt-----
B.belcheri_LOCI09482456_PREDICTED_protein_catecholamines_uplike -----slatal1isaapfvflfvlpieanta-----
F.catus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----aaaaatwhawmslpwlwhggpeaplhcscrapragrgwfgpagpeepogacrglssrqqrkrilgpgpaewgaaghlldlppglthggagwglptardspg-----
S.salar_LOCI06563524_zinc_transporter_ZIP13_isoform_X2 -----slvgsvavlgsgifflvipiesnts-----
C.carpio_LOCI09094209_zinc_transporter_ZIP13_isoform_X1 -----slvgsvaiglgsgvfpflvipieagta-----
S.kowalevskii_LOCI02808884_PREDICTED_zinc_transporter_ZIP13like -----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----aigatv1isaapfvflfvlpvesnsp-----
C.carpio_LOCI09044923_zinc_transporter_Slc39a7like_isoform_X2 -----aigatl1isaapfvflfvlpvqsntd-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----aigatv1isaapfvflfvlpvesnsp-----
S.salar_ke4_zinc_transporter_SLC39A7_precursor -----aigatl1isaapfvflfvlpvqsntd-----
X.laavis_slc39a13_L_zinc_transporter_ZIP13_isoform_X1 -----sligslvlgsgvfpflvipietgae-----
C.carcharias_slc39a13_zinc_transporter_ZIP13 -----sligsvmvlgsgifflvipieagaa-----
G.gallus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----avlsdpalrwhshfflaafpikvsts-----
B.belcheri_LOCI09463185_PREDICTED_LOW_QUALITY_PROTEIN_zinc_transp -----sflgsvavgmvgvfpflvipieagpa-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----aigatv1isaapfvflfvlpvesnsp-----
P.marinus_SLC39A13_NA -----glggacivlgsgvfpillipentgah-----
S.canicula_slc39a7_zinc_transporter_Slc39a7_isoform_X1 -----aigatv1isaapfvflfvlpvesnts-----
P.marinus_SLC39A7_NA -----aigatl1isaapfvflfvlpvldsda-----
500Å 520Å 540Å 560Å 580Å
H.sapiens_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----l-----r-----seagawrlkqlsfalgll-----gnvf1hl1peawayt-----
S.salar_slc39a13_zinc_transporter_ZIP13_precursor -----l-----k-----taagcrklkqlsfalgll-----gdvf1hl1peawahs-----
S.townsendi_SLC39A7_zinc_transporter_SLC39A7 -----ghqallk1llsfasgll-----gdaf1hl1phaleph-----
S.purpuratus_LOC582713_protein_catecholamines_up -----ggesllkvllsfasgll-----gdaf1hl1phslsph-----
G.aculeatus_slc39a13_zinc_transporter_ZIP13_isoform_X2 -----l-----k-----teagqgrlkqlsfalgll-----gdvf1hl1peawels-----
S.salar_slc39a7_zinc_transporter_Slc39a7 -----ghqnlkvl1sfasgll-----gdaf1hl1phaleph-----
S.townsendi_SLC39A13_zinc_transporter_ZIP13 -----l-----k-----seegshrakqlsfalgll-----gnvf1hl1peawayt-----
S.kowalevskii_LOCI00372977_PREDICTED_LOW_QUALITY_PROTEIN_zinc_tra -----ehesllkvllsfasgll-----gdaf1hl1phaisph-----
C.carpio_LOCI09093802_zinc_transporter_ZIP13like_isoform_X1 -----l-----k-----teagcqklkllsfalgll-----gdvf1hl1peawayt-----
G.gangeticus_SLC39A13_PREDICTED_zinc_transporter_ZIP13 -----l-----r-----seagscrklkqlsfalgll-----gnvf1hmlpeawayt-----
X.laavis_slc39a7_S_zinc_transporter_SLC39A7_isoform_X1 -----ghqslkll1sfasgll-----gdaf1hl1phaleph-----
C.carpio_LOCI09056796_zinc_transporter_Slc39a7 -----ghqnlkvl1sfasgll-----gdaf1hl1phaleph-----
C.carcharias_LOCI21291098_zinc_transporter_SLC39A7like_isoform_X2 -----khkcllkvl1sfasgll-----gdaf1hl1phaleph-----
D.erio_slc39a7_zinc_transporter_Slc39a7_precursor -----ghqnlkvl1sfasgll-----gdaf1hl1phaleph-----
F.catus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 -----rhrrslqillsfasgll-----gdaf1hl1phaleph-----
S.purpuratus_LOC584043_zinc_transporter_ZIP13_isoform_X1 -----a-----h-----dergaakfncilsfavgll-----gdvf1hl1peawahl-----
D.erio_slc39a13_zinc_transporter_ZIP13 -----l-----k-----teagcqklkllsfalgll-----gdvf1hl1peawayt-----
X.laavis_slc39a13_S_zinc_transporter_ZIP13 -----l-----r-----seksqrklkqlsfalgll-----gdvf1hl1peawayt-----
E.caballus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 -----rhrrslqillsfasgll-----gdaf1hl1phaleph-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----rhrrslqillsfasgll-----gdaf1hl1phaleph-----
X.laavis_slc39a7_L_solute_carrier_family_39_member_7_L_homeolog_i -----ghqslkll1sfasgll-----gdaf1hl1phaleph-----
S.canicula_slc39a13_zinc_transporter_ZIP13 -----l-----k-----skdgsqrklrllsfalgll-----gdvf1hl1peawayt-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----rhrrslqillsfasgll-----gdaf1hl1phaleph-----
C.mydas_SLC39A13_zinc_transporter_ZIP13 -----l-----q-----sevgsnrllkqlsfalgll-----gnvf1hl1peawayt-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----rhrrslqillsfasgll-----gdaf1hl1phaleph-----
C.mydas_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 -----ghqallk1llsfasgll-----gdaf1hl1phalvph-----
E.caballus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----l-----r-----seagarrlkqlsfalgll-----gnvf1hl1peawayt-----
B.belcheri_LOCI09482456_PREDICTED_protein_catecholamines_uplike -----ehqplkvl1sfasgll-----gdaf1hl1phatph-----
F.catus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----dgdyaalrrprl-----s-----fvagarrlkqlsfalgll-----gnvf1hl1peawayt-----
S.salar_LOCI06563524_zinc_transporter_ZIP13_isoform_X2 -----l-----e-----taagcrklkqlsfalgll-----gdvf1hl1peawahs-----
C.carpio_LOCI09094209_zinc_transporter_ZIP13_isoform_X1 -----l-----k-----teagcqklkllsfalgll-----gdvf1hl1peawayt-----
S.kowalevskii_LOCI02808884_PREDICTED_zinc_transporter_ZIP13like -----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----rhrrslqillsfasgll-----gdaf1hl1phaleph-----
C.carpio_LOCI09044923_zinc_transporter_Slc39a7like_isoform_X2 -----ghqnlkvl1sfasgll-----gdaf1hl1phaleph-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----rhrrslqillsfasgll-----gdaf1hl1phaleph-----
S.salar_ke4_zinc_transporter_SLC39A7_precursor -----ghqnlkvl1sfasgll-----gdaf1hl1phalvph-----
X.laavis_slc39a13_L_zinc_transporter_ZIP13_isoform_X1 -----l-----r-----seksqrklrllsfalgll-----gdvf1hl1peawayt-----
C.carcharias_slc39a13_zinc_transporter_ZIP13 -----l-----k-----skdgsqrklrllsfalgll-----gdvf1hl1peawayt-----
G.gallus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----pallsprdg-----avspqrglytspggeprprpappgrvpvalrqaelpptpprwppearaacprggagaaeeagt dvagrrrr-----
B.belcheri_LOCI09463185_PREDICTED_LOW_QUALITY_PROTEIN_zinc_transp -----l-----r-----kgahagrklmlsfavgall-----gdvf1hl1peawlhr-----
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor -----rhrrslqillsfasgll-----gdaf1hl1phaleph-----
P.marinus_SLC39A13_NA -----l-----q-----speqgrlrlfllsfavgll-----gdvf1hl1petwqh-----
S.canicula_slc39a7_zinc_transporter_Slc39a7_isoform_X1 -----khkcllkvl1sfasgll-----gdaf1hl1phaleph-----
P.marinus_SLC39A7_NA -----trssllhtllsfasgll-----gdaf1hl1phaleph-----
600Å 620Å 640Å 660Å 680Å
H.sapiens_SLC39A13_zinc_transporter_ZIP13_isoform_X1 -----csa-----s-----p-----g-----g-----eggs-----l-----q-----q-----q-----q-----l-----g-----l-----w-----i-----a-----g-----i-----
S.salar_slc39a13_zinc_transporter_ZIP13_precursor -----hsc-----s-----p-----p-----d-----e-----sq-----p-----l-----h-----y-----r-----t-----q-----g-----l-----w-----i-----m-----g-----m-----
S.townsendi_SLC39A7_zinc_transporter_SLC39A7 -----shp-----g-----e-----ggg-----hshgae-----akpp-----a-----h-----ghsh-----t-----q-----d-----p-----s-----h-----h-----m-----m-----v-----g-----l-----w-----l-----g-----i-----
S.purpuratus_LOC582713_protein_catecholamines_up -----shg-----d-----h-----ghd-----hehehghhehshdh-----ghshghdh-----srmlvgfwlvgi-----
G.aculeatus_slc39a13_zinc_transporter_ZIP13_isoform_X2 -----rss-----a-----g-----g-----g-----h-----h-----m-----m-----v-----g-----l-----w-----l-----g-----i-----
S.salar_slc39a7_zinc_transporter_Slc39a7 -----shhg-----d-----e-----ggg-----hsns-----eesq-----y-----h-----ghsh-----t-----q-----d-----p-----s-----h-----h-----m-----m-----v-----g-----l-----w-----l-----g-----i-----
S.townsendi_SLC39A13_zinc_transporter_ZIP13 -----csa-----a-----t-----g-----g-----g-----g-----h-----h-----m-----m-----v-----g-----l-----w-----l-----g-----i-----
S.kowalevskii_LOCI00372977_PREDICTED_LOW_QUALITY_PROTEIN_zinc_tra -----sht-----g-----d-----etd-----aah-----ghshdg-----aghd-----shdmnvglwltgi-----
C.carpio_LOCI09093802_zinc_transporter_ZIP13like_isoform_X1 -----asp-----d-----g-----g-----g-----h-----h-----m-----m-----v-----g-----l-----w-----l-----g-----i-----
G.gangeticus_SLC39A13_PREDICTED_zinc_transporter_ZIP13 -----csa-----t-----a-----g-----g-----g-----h-----h-----m-----m-----v-----g-----l-----w-----l-----g-----i-----
X.laavis_slc39a7_S_zinc_transporter_SLC39A7_isoform_X1 -----saheav-----ae-----p-----eesh-----g-----h-----ghsh-----t-----q-----d-----p-----s-----h-----h-----m-----m-----v-----g-----l-----w-----l-----g-----i-----
C.carpio_LOCI09056796_zinc_transporter_Slc39a7 -----shhg-----q-----s-----h-----ghs-----g-----s-----h-----ghsh-----t-----q-----d-----p-----s-----h-----h-----m-----m-----v-----g-----l-----w-----l-----g-----i-----

C.carcharias_LOC121291098_zinc_transporter_SLC39A7like_isoform_X2 ----shse-----a-p-----eps-hshsg-----np-----dinhdhshgdhg-hd-----hshvmsvlgwlvagi
D.erio_slc39a7_zinc_transporter_Slc39a7_precursor ----shhs-----q-p-----hse-eshgqs-----hgee-----s-hghsh-----g-aa-----hghmmsvlgwlvagi
F.catus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 ----shhpl-----eq-p-----g-hghsh-----s-g-----ggpilsvlgwlvagi
S.purpuratus_LOC584043_zinc_transporter_ZIP13_isoform_X1 ----dhd-----dsh-----dy-----ngqitvlgwlvifgm
D.erio_slc39a13_zinc_transporter_ZIP13 ----ssp-----g-----sh-----rhyctgglviggi
X.laievis_slc39a13.S_zinc_transporter_ZIP13 ----csa-----t-t-----g-syqsl-----kqqrlglwlvigi
E.caballus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 ----shhpg-----eh-p-----g-hghsh-----s-g-----ggpilsvlgwlvagi
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----shhtl-----eq-p-----g-hghsh-----s-g-----ggpilsvlgwlvagi
X.laievis_slc39a7.L_solute_carrier_family_39_member_7_L_homeolog_i ----svneav-----ae-p-----eeth-----g-hghsh-----g-gs-----hsqmlvlgwlvagi
S.canicula_slc39a13_zinc_transporter_ZIP13 ----cns-----n-p-----d-gshsr-----kqqrklglwlvigi
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----shhtl-----eq-p-----g-hghsh-----s-g-----ggpilsvlgwlvagi
C.mydas_SLC39A13_zinc_transporter_ZIP13 ----csa-----t-a-----g-ggqsl-----gqqqlglwlvigi
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----shhtl-----eq-p-----g-hghsh-----s-g-----ggpilsvlgwlvagi
C.mydas_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 ----shhg-----d-e-----ghg-hshds-----eesq-----d-hghsh-----g-aa-----hghmmsvlgwlvagi
E.caballus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 ----csa-----s-p-----g-----g-egqsl-----gqqqglglwlvagi
B.belcheri_LOC109482456_PREDICTED_protein_catecholamines_uplike ----thgde-----d-h-----gh-----sh-----g-hghsh-----ggdng-----hshdvgwlvagi
F.catus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 ----csa-----s-pvppag-----g-egqsl-----ggdng-----gqqqglglwlvagi
S.salar_LOC106563524_zinc_transporter_ZIP13_isoform_X2 ----hsc-----s-p-----d-esq-----lhrtqglwlvimgm
C.carpio_LOC109094209_zinc_transporter_ZIP13_isoform_X1 ----srp-----d-----g-ph-----rhftqglwlvigi
S.kowalevskii_LOC102808884_PREDICTED_zinc_transporter_ZIP13like ----shhtl-----eq-p-----g-hghsh-----s-g-----ggpilsvlgwlvagi
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----shhg-----q-s-----hgsdeshgs-----ee-s-hghsh-----g-aa-----hghmmlvlgwlvigi
C.carpio_LOC109044923_zinc_transporter_Slc39a7like_isoform_X2 ----shhtl-----eq-p-----g-hghsh-----s-g-----ggpilsvlgwlvagi
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----shhg-----d-e-----ghg-hshds-----eesq-----d-hghsh-----g-aa-----hghmmsvlgwlvagi
S.salar_ke4_zinc_transporter_SLC39A7_precursor ----shhg-----d-e-----ghg-hshds-----eesq-----d-hghsh-----g-aa-----hghmmsvlgwlvagi
X.laievis_slc39a13.L_zinc_transporter_ZIP13_isoform_X1 ----cns-----n-p-----d-gshsr-----kqqrklglwlvigi
C.carcharias_slc39a13_zinc_transporter_ZIP13 ----cns-----n-p-----d-gshsr-----kqqrklglwlvigi
G.gallus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 ----ggaagrqrppapsggwwaaserqta-----a-l-----eggsf-----gqqklglwlvigi
B.belcheri_LOC109463185_PREDICTED_LOW_QUALITY_PROTEIN_zinc_transp ----gdp-----d-----eek-----hghnwglwtiagi
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----shhtl-----eq-p-----g-hghsh-----s-g-----ggpilsvlgwlvagi
P.marinus_SLC39A13_NA ----c-----g-----tqgaglvwtvagi
S.canicula_slc39a7_zinc_transporter_Slc39a7_isoform_X1 ----phie-----a-a-----ehs-hshld-----np-----d-lkhsheahd-----hd-----hshvmavglwlvagi
P.marinus_SLC39A7_NA ----shhs-----e-s-----ghg-hshghg-----ethng-----g-hghsh-----g-p-----gshlmsvlgwlvagi
700Å 720Å 740Å 760Å 780Å
H.sapiens_SLC39A13_zinc_transporter_ZIP13_isoform_X1 ----ltflalekmfldskeeg-tsqaq-n-k-d-p-t-----a-----
S.salar_slc39a13_zinc_transporter_ZIP13_precursor ----lsflllenmfpdensqedsigss-q-h-----v-p-----t-----s-hss
S.townsendi_SLC39A7_zinc_transporter_SLC39A7 ----vafllvkekfvrvhvkqgshghshat-----k-----
S.purpuratus_LOC582713_protein_catecholamines_up ----ilfilvkekfvrlvkqdgahshsh-g-h-----t-e-----k-----a-keve
G.aculeatus_slc39a13_zinc_transporter_ZIP13_isoform_X2 ----laflllekmfpdkdshedlpads-d-lns-n-s-----a-----
S.salar_slc39a7_zinc_transporter_Slc39a7 ----vafllvkekfvrlkqgghghshsq-a-----pk
S.townsendi_SLC39A13_zinc_transporter_ZIP13 ----ltflislgkmpfdhekgessilvs-d-a-v-----a-----p-----rkdsd
S.kowalevskii_LOC100372977_PREDICTED_LOW_QUALITY_PROTEIN_zinc_tra ----iafllvkekfvrvhvkqgghghshsh-g-h-----s-h-----a-agqe-----e-----
C.carpio_LOC109093802_zinc_transporter_ZIP13like_isoform_X1 ----lsflllekmfpdedsipeskaac-q-r-----t-----k-----sst
G.gangeticus_SLC39A13_PREDICTED_zinc_transporter_ZIP13 ----ltflivlekifpendedgrlatds-d-s-r-----a-----p-----
X.laievis_slc39a7.S_zinc_transporter_ZIP13_isoform_X1 ----iafllvkekfvrlhkqeghghshsh-a-a-----k-e-----s-----lad
C.carpio_LOC109056796_zinc_transporter_Slc39a7 ----vafllvkekfvrlkqgghghshsh-a-----pk
C.carcharias_LOC121291098_zinc_transporter_SLC39A7like_isoform_X2 ----iafllvkekfvrvhvkqgghshghth-a-a-----a-----pk
D.erio_slc39a7_zinc_transporter_Slc39a7_precursor ----vafllvkekfvrlkqgghghshsh-s-p-s-----a-----pk
F.catus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 ----vafllvkekfvrvhvkqgghghshgh-g-h-----a-h-----g-ptqgghghgr-----qer-----ssk
S.purpuratus_LOC584043_zinc_transporter_ZIP13_isoform_X1 ----vlflisiekifgeeeaeessckee-q-n-----ggiktaimgndg-----katil-----lnga-pst
D.erio_slc39a13_zinc_transporter_ZIP13 ----msfltlekmfpdevdgdpetktsf-q-r-----t-----t-----s-----sss
X.laievis_slc39a13.S_zinc_transporter_ZIP13 ----lgflilektfsdknheeqvdstt-p-k-----v-----a-----hsk
E.caballus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 ----vafllvkekfvrvhvkqgghghshgh-g-h-----t-h-----g-hthgshrhgr-----qer-----hsk
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----vafllvkekfvrvhvkqgghghshgh-g-h-----a-h-----s-htrgshghgr-----qer-----stk
X.laievis_slc39a7.L_solute_carrier_family_39_member_7_L_homeolog_i ----iafllvkekfvrlhkqeghghshsh-a-a-----k-e-----k-----ivd
S.canicula_slc39a13_zinc_transporter_ZIP13 ----laffilekvfpdkdeeteyhkkp-f-qktntl-q-----n-----grfgvdk-----aikrlkngk-----vlps-ast
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----vafllvkekfvrvhvkqgghghshgh-g-h-----a-h-----s-htrgshghgr-----qer-----stk
C.mydas_SLC39A13_zinc_transporter_ZIP13 ----ltflalekmflesekqewpctgn-n-s-k-----a-----p-----stk
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----vafllvkekfvrvhvkqgghghshgh-g-h-----a-h-----s-htrgshghgr-----qer-----stk
C.mydas_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 ----ltflilekmfleskekegtsqap-s-k-d-p-----a-----tk
E.caballus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 ----ltflilekmfleskekegtsqap-s-k-d-p-----a-----tk
B.belcheri_LOC109482456_PREDICTED_protein_catecholamines_uplike ----lafllvkekfvrvhvkqgghghshgh-h-----t-h-----n-appeesgspe-----eee-----k-----peae
F.catus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 ----ltflalekmfldskeegtsqaq-s-k-d-p-----a-----
S.salar_LOC106563524_zinc_transporter_ZIP13_isoform_X2 ----lsflllekmfpdensqedsigss-q-h-----v-p-----e-----whpcpgsfivaityrdgeaaatstserpeesvqgvivrlwts-hss
C.carpio_LOC109094209_zinc_transporter_ZIP13_isoform_X1 ----lsflllekmfpdensqedsigss-q-h-----v-p-----e-----whpcpgsfivaityrdgeaaatstserpeesvqgvivrlwts-hss
S.kowalevskii_LOC102808884_PREDICTED_zinc_transporter_ZIP13like ----lsflllekmfpdensqedsigss-q-h-----v-p-----e-----whpcpgsfivaityrdgeaaatstserpeesvqgvivrlwts-hss
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----vafllvkekfvrvhvkqgghghshgh-g-h-----a-h-----s-htrgshghgr-----qer-----stk
C.carpio_LOC109044923_zinc_transporter_Slc39a7like_isoform_X2 ----vafllvkekfvrlkqgghghshsh-a-----pk
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----vafllvkekfvrvhvkqgghghshgh-g-h-----a-h-----s-htrgshghgr-----qer-----stk
S.salar_ke4_zinc_transporter_SLC39A7_precursor ----vafllvkekfvrlkqeghghshsh-a-----pk
X.laievis_slc39a13.L_zinc_transporter_ZIP13_isoform_X1 ----lsfllilektfsdkeheeqvdttt-t-k-----v-----a-----pk
C.carcharias_slc39a13_zinc_transporter_ZIP13 ----laffilekvfpdkdeeteyhkt-----kttl-q-----n-----ghvcvdk-----aikhhnkrk-----lips-ast
G.gallus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 ----ltflalekifleekesqpgvcg-d-y-k-----a-----p-----
B.belcheri_LOC109463185_PREDICTED_LOW_QUALITY_PROTEIN_zinc_transp ----msflimektftdatagdkadsqet-s-----e-----h-rntph-kgngslppyq-----dvsqir-----rrslhekd-----s-sgs
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----vafllvkekfvrvhvkqgghghshgh-g-h-----a-h-----s-htrgshghgr-----qer-----stk
P.marinus_SLC39A13_NA ----ltflivlekfpdvdeedpatng-v-a-----t-----g-----n-----
S.canicula_slc39a7_zinc_transporter_Slc39a7_isoform_X1 ----iafllvkekfvrvhvkqgghshsh-a-----t-----g-----ekq-----ekq-akk-----pk
P.marinus_SLC39A7_NA ----ivflavemfvrlhkqgshghghsh-s-h-----s-h-----g-ekq-----ekq-akk-----sdk
800Å 820Å 840Å 860Å 880Å
H.sapiens_SLC39A13_zinc_transporter_ZIP13_isoform_X1 ----dss-----se-----aaaaln-ghhc-----la-----ws-----qp
S.salar_slc39a13_zinc_transporter_ZIP13_precursor ----vkc-----sdde-eeke-s-----pr-gage-----ka-----as-----rrk
S.townsendi_SLC39A7_zinc_transporter_SLC39A7 ----dd-gpvk-----kgd-ssqvrirt-geke-----ea-----ek
S.purpuratus_LOC582713_protein_catecholamines_up ----sis-----afs-----g-----kp-saslr-ghha-----es-----wks
G.aculeatus_slc39a13_zinc_transporter_ZIP13_isoform_X2 ----ake-----sdge-kkkk-----n-----e-gekd-----lke-----nk-----de
S.salar_slc39a7_zinc_transporter_Slc39a7 ----akrpn-----gnsf-----sigdgaspvhtk-mgm-----aqsn
S.townsendi_SLC39A13_zinc_transporter_ZIP13 ----tdsdir-q-rrkt-----ds-----ded-----k-keev
S.kowalevskii_LOC100372977_PREDICTED_LOW_QUALITY_PROTEIN_zinc_tra ----als-----sevs-----vspktn-gics-----nn-----nad-----skp
C.carpio_LOC109093802_zinc_transporter_ZIP13like_isoform_X1 ----akrpn-----gssf-----spgkatstvtqrg-tgv-----tqcn
G.gangeticus_SLC39A13_PREDICTED_zinc_transporter_ZIP13 ----d-a-----teke-eeekdpkd-gvrhrk-kgns-----ta-----qk
X.laievis_slc39a7.S_zinc_transporter_SLC39A7_isoform_X1 ----akd-----sdee-dddk-----k-q-----ekd-----kta-----ds-----dk
C.carpio_LOC109056796_zinc_transporter_Slc39a7 ----ake-----ssee-ednk-----h-----gepr-ggvr-----r-----rkp-----evp
D.erio_slc39a7_zinc_transporter_Slc39a7_precursor ----skd-----sdee-ddkk-----g-q-----kk-gekd-----kv-----vs-----qq
F.catus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 ----akd-----ssee-eeke-----ag-gsrkr-ggst-----glk-----dgp-----vr
S.purpuratus_LOC584043_zinc_transporter_ZIP13_isoform_X1 ----dls-----sqfs-----vsgptn-gics-----nn-----nsd-----skp
D.erio_slc39a13_zinc_transporter_ZIP13 ----dls-----sqfs-----vsgptn-gics-----nn-----nsd-----skp
X.laievis_slc39a13.S_zinc_transporter_ZIP13 ----dls-----sqfs-----vsgptn-gics-----nn-----nsd-----skp
E.caballus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 ----ake-----ssee-eeke-----ag-glrrk-ggnm-----gpk-----dgp-----vr
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----ekq-----ssee-eeke-----tr-gvqrr-ggst-----vpk-----dgp-----vr
X.laievis_slc39a7.L_solute_carrier_family_39_member_7_L_homeolog_i ----d-a-----teke-eeekdpkd-gvrqrk-kgss-----tv-----qk
S.canicula_slc39a13_zinc_transporter_ZIP13 ----rrn-----gs-----ciqpin-gych-----s-----sa
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----ekq-----ssee-eeke-----tr-gvqrr-ggst-----vpk-----dgp-----vr
C.mydas_SLC39A13_zinc_transporter_ZIP13 ----srgtpn-----gnsf-----slgkvagkvqrak-tnm-----aqcn
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor ----aks-----ssee-eeke-----tr-gvqrr-ggst-----vpk-----dgp-----vr
C.mydas_SLC39A7_zinc_transporter_SLC39A7_isoform_X1 ----aks-----ssee-eeke-----tr-gvqrr-ggst-----vpk-----dgp-----vr
E.caballus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 ----aaaaln-ggry-----la-----dkaap-----kkp
B.belcheri_LOC109482456_PREDICTED_protein_catecholamines_uplike ----ake-----gstddkeke-get-elkrssrsgkeekseekdl-----dgd-----vqke
F.catus_SLC39A13_zinc_transporter_ZIP13_isoform_X1 ----aaaaln-ggry-----la-----dkaap-----kkp
S.salar_LOC106563524_zinc_transporter_ZIP13_isoform_X2 ----das-----se-----tlshin-ghhs-----dt-----ws-----sss
C.carpio_LOC109094209_zinc_transporter_ZIP13_isoform_X1 ----dls-----sevs-----vsgptn-gics-----nn-----nsd-----skp

S.kowalevskii_LOC102808884_PREDICTED_zinc_transporter_ZIP13like
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.carpio_LOC109044923_zinc_transporter_Slc39a7like_isoform_X2
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
S.salar_ke4_zinc_transporter_SLC39A7_precursor
X.lauevis_slc39a13.L_zinc_transporter_ZIP13_isoform_X1
C.carcharias_slc39a13_zinc_transporter_ZIP13
G.gallus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
B.belcheri_LOC109463185_PREDICTED_LOW_QUALITY_PROTEIN_zinc_transp
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
P.marinus_SLC39A13_NA
S.canicula_slc39a7_zinc_transporter_Slc39a7_isoform_X1
P.marinus_SLC39A7_NA

H.sapiens_SLC39A13_zinc_transporter_ZIP13_isoform_X1
S.salar_slc39a13_zinc_transporter_ZIP13_precursor
S.townsendi_SLC39A7_zinc_transporter_SLC39A7
S.purpuratus_LOC582713_protein_catecholamines_up
G.aculeatus_slc39a13_zinc_transporter_ZIP13_isoform_X2
S.salar_slc39a7_zinc_transporter_Slc39a7
S.townsendi_SLC39A13_zinc_transporter_ZIP13
S.kowalevskii_LOC100372977_PREDICTED_LOW_QUALITY_PROTEIN_zinc_tra
C.carpio_LOC109093802_zinc_transporter_ZIP13like_isoform_X1
G.gangeticus_SLC39A13_PREDICTED_zinc_transporter_ZIP13
X.lauevis_slc39a7.S_zinc_transporter_SLC39A7_isoform_X1
C.carpio_LOC109056796_zinc_transporter_Slc39a7
C.carcharias_LOC121291098_zinc_transporter_SLC39A7like_isoform_X2
D.erio_slc39a7_zinc_transporter_Slc39a7_precursor
F.catus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
S.purpuratus_LOC584043_zinc_transporter_ZIP13_isoform_X1
D.erio_slc39a13_zinc_transporter_ZIP13
X.lauevis_slc39a13.S_zinc_transporter_ZIP13
E.caballus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
X.lauevis_slc39a7.L_solute_carrier_family_39_member_7_L_homeolog_i
S.canicula_slc39a13_zinc_transporter_ZIP13
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.mydas_SLC39A13_zinc_transporter_ZIP13
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.mydas_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
E.caballus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
B.belcheri_LOC109482456_PREDICTED_protein_catecholamines_uplike
F.catus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
S.salar_LOC106563524_zinc_transporter_ZIP13_isoform_X2
C.carpio_LOC109094209_zinc_transporter_ZIP13_isoform_X1
S.kowalevskii_LOC102808884_PREDICTED_zinc_transporter_ZIP13like
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.carpio_LOC109044923_zinc_transporter_Slc39a7like_isoform_X2
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
S.salar_ke4_zinc_transporter_SLC39A7_precursor
X.lauevis_slc39a13.L_zinc_transporter_ZIP13_isoform_X1
C.carcharias_slc39a13_zinc_transporter_ZIP13
G.gallus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
B.belcheri_LOC109463185_PREDICTED_LOW_QUALITY_PROTEIN_zinc_transp
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
P.marinus_SLC39A13_NA
S.canicula_slc39a7_zinc_transporter_Slc39a7_isoform_X1
P.marinus_SLC39A7_NA

H.sapiens_SLC39A13_zinc_transporter_ZIP13_isoform_X1
S.salar_slc39a13_zinc_transporter_ZIP13_precursor
S.townsendi_SLC39A7_zinc_transporter_SLC39A7
S.purpuratus_LOC582713_protein_catecholamines_up
G.aculeatus_slc39a13_zinc_transporter_ZIP13_isoform_X2
S.salar_slc39a7_zinc_transporter_Slc39a7
S.townsendi_SLC39A13_zinc_transporter_ZIP13
S.kowalevskii_LOC100372977_PREDICTED_LOW_QUALITY_PROTEIN_zinc_tra
C.carpio_LOC109093802_zinc_transporter_ZIP13like_isoform_X1
G.gangeticus_SLC39A13_PREDICTED_zinc_transporter_ZIP13
X.lauevis_slc39a7.S_zinc_transporter_SLC39A7_isoform_X1
C.carpio_LOC109056796_zinc_transporter_Slc39a7
C.carcharias_LOC121291098_zinc_transporter_SLC39A7like_isoform_X2
D.erio_slc39a7_zinc_transporter_Slc39a7_precursor
F.catus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
S.purpuratus_LOC584043_zinc_transporter_ZIP13_isoform_X1
D.erio_slc39a13_zinc_transporter_ZIP13
X.lauevis_slc39a13.S_zinc_transporter_ZIP13
E.caballus_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
X.lauevis_slc39a7.L_solute_carrier_family_39_member_7_L_homeolog_i
S.canicula_slc39a13_zinc_transporter_ZIP13
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.mydas_SLC39A13_zinc_transporter_ZIP13
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.mydas_SLC39A7_zinc_transporter_SLC39A7_isoform_X1
E.caballus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
B.belcheri_LOC109482456_PREDICTED_protein_catecholamines_uplike
F.catus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
S.salar_LOC106563524_zinc_transporter_ZIP13_isoform_X2
C.carpio_LOC109094209_zinc_transporter_ZIP13_isoform_X1
S.kowalevskii_LOC102808884_PREDICTED_zinc_transporter_ZIP13like
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
C.carpio_LOC109044923_zinc_transporter_Slc39a7like_isoform_X2
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
S.salar_ke4_zinc_transporter_SLC39A7_precursor
X.lauevis_slc39a13.L_zinc_transporter_ZIP13_isoform_X1
C.carcharias_slc39a13_zinc_transporter_ZIP13
G.gallus_SLC39A13_zinc_transporter_ZIP13_isoform_X1
B.belcheri_LOC109463185_PREDICTED_LOW_QUALITY_PROTEIN_zinc_transp
H.sapiens_SLC39A7_zinc_transporter_SLC39A7_isoform_1_precursor
P.marinus_SLC39A13_NA
S.canicula_slc39a7_zinc_transporter_Slc39a7_isoform_X1
P.marinus_SLC39A7_NA

Number of sequences: 44
Alignment width: 1177
Sequence type: aa

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-----ake--sdge-eknk-----gked-----gke-----s-----gk
-----hnn-----gs-----cvqltn-ghch-----s-----st
-----lqkpin-gsgy-----ppskvagksqrae-kns-----tqcn
-----ai*revlrngsaals--skaa--a--ng-kikqen-gpvh-----ls-----en
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-----gvd--sreg-----ngtign-gsai-----snqg-----s-ksa-----skr
-----ane--ssee-eedk--y-----dets-adlr-----h-----rkp-----vvp
-----ekg--dgee-eeve--ge-gvrrrr--pdpa-----ssq-----egkvapadgdgggaqega
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