

a

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hCTR1      ---MD--HS---HHMGMSYDMSNSTMQPSHHHPTTSASHSHGGGDSMMMMPMTFYFGFK
rCTR1      ---MRNNHMEM-HHMGMNHTDDNITM-PPHQHPTTSASHSHE-----MMMMPMTFYFGFK
mCTR1      MNHMGMNHMEMHHHMGMNHTDDNITM-PPHHHPTTSASHSHGG-GDSMMMMPMTFYDFK
sCtrl      ---MD--HS---HH---HHPTMAPPTTSGHDHGGGHGGNQGGHGHGGMV-MTFYFGYN
zCtrl*     ---MDMSHS---HH---HVEETMASPASDDHGGHLTSGNGHGDHMMMMQMTFYFGYK
zCtrl      ---MDSSHS---HH---HVEETMPSPASGDHGGHLTTGNGHGDHMMMMQMTFYFGYK
          *  *      * *      *      *      *      *      *      *      *      *
          Transmembrane

hCTR1      NVELLFSGLVINTAGEMAGAFVAVFLLAMFYEGLKIARESLLRKSQVSIYNSMPVPGPN
rCTR1      NVDLFSSLVINTPEMAGAFVAVFLLAMFYEGLKIAREGLLRKSQVSIYNSMPVPGPN
mCTR1      NVNLLFSGLVINTPEMAGAFVAVFLLAMFYEGLKIAREGLLRKSQVSIYNSMPVPGPN
sCtrl      NVELLFTGLLINTPEMVGACIGVFLAVLYEGLKMGRVTLRRSQVNVYNSMPLPGAD
zCtrl*     NVELLFAGLVINTPEMAGACIGVFLAVLYEGLKIGREVLLRRNQVNVYNSMPVPGSD
zCtrl      NVELLFAGLVINTPEMAGACIGVFLAVLYEGLKIGREVLLRRNQVNVYNSMPVPGSD
          * * * * * : * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
          Transmembrane      Transmembrane

hCTR1      GTILMETHKTVGQQMLSFPHLLQTVLHIIQVVISYFLMLIFMTYNGYLCIAVAAGAGTGY
rCTR1      GTILMETHKTVGQQMLSFPHLLQTVLHIIQVVISYFLMLIFMTYNGYLCIAVAAGAGTGY
mCTR1      GTILMETHKTVGQQMLSFPHLLQTVLHIIQVVISYFLMLIFMTYNGYLCIAVAAGAGTGY
sCtrl      GTVLMETHKTVGQRLSPAHLFQTVLHIVQVVSYFLMLVFMTYNAYLCIAVAAGAGMGY
zCtrl*     GTVLMETHKTVGQRLSMAHFLQTVLHIIQVVSYFLMLVFMTYNGYLCIAVAAGAGLGY
zCtrl      GTVLMETHKTVGQRLSMAHFLQTVLHIIQVVSYFLMLVFMTYNGYLCIAVAAGAGLGY
          * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *

hCTR1      FLFSWKAVVVDITECH
rCTR1      FLFSWKAVVVDITECH
mCTR1      FLFSWKAVVVDITECH
sCtrl      FLFSWKAVVVDITECH
zCtrl*     FLFSWKAVVVDITECH
zCtrl      FLFSWKAVVVDITECH
          * * * * * * * * * * * * * * * * * *

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b

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Metal binding      Nuclear localization signal

sAtox1      MPKHFEFVAMTCEGCSGAVTRVLNKLEGVTFEIDLPOKLWIESDKDVEVLMTQLKCKGK
zAtox1*     MTTHFEFFVDMTCEGCSGAVTRVLNKLD-VKFDIDLPNKKVFIESDKNTDVLLETLLKKTGK
zAtox1      MTTHFEFFVDMTCEGCSGAVTRVLNKLD-VKFDIDLPNKKVFIESDKNTDVLLETLLKKTGK
hATOX1      MPKHFEFSVDMTCGGCAEAVSRVLNKLGGVKYDIDLPNKKVCIESEHSDTLLATLTKKTGK
rATOX1      MPKHFEFSVDMTCGGCAEAVSRVLNKLGGVEFNIDLPNKKVCIESEHSSDILLATLTKKTGK
mATOX1      MPKHFEFSVDMTCGGCAEAVSRVLNKLGGVEFNIDLPNKKVCIDSEHSSDTLLATLTKKTGK
          * . * * * * * * * * * * * * * * * * * * * * * * * * * * *

sAtox1      EVKYNGTK
zAtox1*     TVTYIGTK
zAtox1      TVTYIGTK
hATOX1      TVSYLGLE
rATOX1      AVSYLGPK
mATOX1      AVSYLGPK
          * . * * :

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