

Figure S1, related to Figure 1

A

Sequence alignment of the MEIS domain

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Prep2 H.sapiens      1 QAQLEADKRAVYRHPLFPLLTLLEFEKCEQATQGSECITSASFVDVDIENFVHQEQEHKPF
Prep2 M.musculus    1 QAQLEADKRAVYRHPLFPLLTLLEFEKCEQATQGSECITSASFVDVDIENFVHQEQEHKPF
Prep1 H.sapiens     1 QTPMDVDKQAIYRHPLFPLLALLFEKCEQSTQGSEGTTSASFVDVDIENFVRKQEKKGKPF
Prep1 M.musculus    1 QTPMDADKQAIYRHPLFPLLALLFEKCEQSTQGSEGTTSASFVDVDIENFVRKQEKDGKPF
X.tropicalis        1 QAQLEADKRAVYRHPLFPLLTLLEFEKCEQATQGSECITSASFVDVDIENFVHQEQEHKPF
Prep1.1 D.rerio     1 QTQMDIDKACIYRHPLFPLLALLFEKCEQSTLGSDCVTSASFVDVDIENFVRSQEKDGKAF
Smed-prep           1 ADGLEKEKKSIVGHPLYPILSLLLEQCEQATASPDSSQSPDTFEADLQSYILRNDNNEKYF
C.intestinalis      1 AAQLENDKHLIKTHPLFVLLLELFEKCEATRGEDNPTSLSFDDDIQEFVRREDFRMSPI
T.castaneum         1 QAQFEADKRAVYKHPLFPLLALLFERCELATQSSDPQSSDAFNLDIQAFVQHQERDRKPF
A.mellifera         1 QAQFEADKRAVYKHPLFPLLALLFERCEQATQSSDNSTSESNMDIQAFVQHQERDRKPF
H.magnipapillata    1 ---MENEKVAIYRHPLFPLLALLLEKCEHATQTSDCPTSDAFDNDIKNFMQHNREGKPC
N.vectensis         1 ---MENEKVAIYRHPLFPLLALLLEKCEHATQTSDCPTSDAFDNDIKNFMQHNREGKPC
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Prep2 H.sapiens      61 FSDDPELDNLMVKAIQVLRHLLLEKVNELCKDFCNRYITCLKTKMHSNLLRN
Prep2 M.musculus    61 FSDDPELDNLMVKAIQVLRHLLLEKVNELCKDFCNRYITCLKTKMHSNLLRN
Prep1 H.sapiens     61 FCEDPETDNLNVKAIQVLRHLLLEKVNELCKDFCSRYIACLKTKMNSSETLLSG
Prep1 M.musculus    61 FCEDPETDNLNVKAIQVLRHLLLEKVNELCKDFCSRYIACLKTKMNSSETLLSG
X.tropicalis        61 FSDDPELDNLMVKAIQVLRHLLLEKVNELCKDFCNRYITCLKTKMHSNLLRN
Prep1.1 D.rerio     61 FSEDPPDLNLMVKAIQVLRHLLLEKVSLLCKDFCSRYISCLKAKMNSSETLLSG
Smed-prep           61 FTDNKDLDLSLMVKAIQVLRHLLLEKVNELCKDFCSRYINCLKTKIQSDSMFDD
C.intestinalis      61 IIDNPEIDNLMVKAIQVLRHLLLEKVNELCKDFCHRYITCLKGKMQSENLLRT
T.castaneum         61 LANPEIDGLMVKAIQVLRHLLLEKVNELCKDFCNRYITCLKGKMQSENLLRS
A.mellifera         61 LINDPEIDGLMVKAIQVLRHLLLEKVNELCKDFCNRYITCLKGKMQSENLLRS
H.magnipapillata    58 FSGDQELDNLIIKAIQVFRHLLLEKVNELCKDFCQRYIACLKGKMQSENLLR-
N.vectensis         58 FSGDQELDNLIIKAIQVFRHLLLEKVNELCKDFCQRYIACLKGKMQSENLLR-
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B

Sequence alignment of the Homeodomain

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Prep2 H.sapiens      1 KSKNKRGLPKHATNIMRSWLFQHLHHPYPTDEKQRIAAQTNLTLQVNNWFINARRRILQPM
Prep2 M.musculus    1 KSKNKRGLPKHATNIMRSWLFQHLHHPYPTDEKQRIAAQTNLTLQVNNWFINARRRILQPM
Prep1 H.sapiens     1 SSKNKRGLPKHATNVMRSWLFQHLGHHPYPTDEKKQIAAQTNLTLQVNNWFINARRRILQPM
Prep1 M.musculus    1 SSKNKRGLPKHATNVMRSWLFQHLGHHPYPTDEKKQIAAQTNLTLQVNNWFINARRRILQPM
Prep1.1 D.rerio     1 SPKNKRGLPKQATNVMRSWLFQHIAHPYPTEEKQIATQTNLTLQVNNWFINARRRILQPM
X.tropicalis        1 KSKNKRGLPKHATNIMRSWLFQHLHHPYPTDEKQRIAAQTNLTLQVNNWFINARRRILQPM
Smed-prep           1 PTKOKRGLPKKATQIMKQWLFQHLVHPYPTDEKROIATQTNLTLQVNNWFINARRRILQPM
C.intestinalis      1 GRKTKRGLPKQATEILRSWLFSHIVHPYPTDEKRSLATQTNLTLQVNNWFINARRRILQPM
T.castaneum         1 -RKQKRGLPKHATSVMRSWLFQHLVHPYPTDEKRHIAAQTNLTLQVNNWFINARRRILQPM
A.mellifera         1 KGRQKRGLPKQATSIMRTWLFELHIVHPYPTDEKRQIASQTNLTLQVNNWFINARRRILQPM
H.magnipapillata    1 TVKSKRGLPKQATSIMKTWLFQHIMHPYPTDEKRSTIAQQTNLTLQVNNWFINARRRILQPM
N.vectensis         1 TVKSKRGLPKQATSIMKTWLFQHIMHPYPTDEKRSTIAQQTNLTLQVNNWFINARRRILQPM
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