## SUPPLEMENTARY MATERIAL

corresponding to:

# Role of polycomb proteins Ring1A and Ring1B in the epigenetic regulation of gene expression 

MIGUEL VIDAL


Ring_Nvi
Ring_Aae
Ring_Aga
Ring_Tca
Sce_Dme


Ring_Nve
Ring_Bfl
Ring $\overline{1}$ Hsa
Ring1_Mus
Ring1_Xtr
Ring1_Ssa
Rnf2_Mus
Rnf2-Hsa
Rnf2-Oan
Rnf2_Gga
Rnf2_Xtr
Rnf2_Dre
Rnf2-Tni
Ring_Spu
Ring_Ame
Ring_Nvi
Ring_Aae
Ring_Aga
Ring_Tca
Sce_Dme
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Ring_Nve
Ring_Bfl
Ring1_Hsa
Ring1_Mus
Ring1_Xtr
Ring1 Ssa
Rnf2_Mus
Rnf2-Hsa
Rnf2-Oan
Rnf2_Gga Rnf2-Xtr Rnf2_Dre Rnf2_Tni Ring_Spu Ring_Ame Ring_Nvi Ring_Aae Ring_Aga Ring_Tca Sce_Dme



Ring_Nve
Ring
Ring1-Mus
Ring1-Mus
Ring1_Xtr
Ring ${ }^{1} \mathrm{Ssa}$
Rnf2_Mus
Rnf2-Hsa
Rnf2-Oan
Rnf2_Gga
Rnf2_Xtr
Rnf2-Dre
Rnf2_Tni
Ring_Spu
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sce Dme

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| DTASEKQYTIYIATA--NGQ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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| TIYIPTA--SNQ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - V NMEAASEKQYTIYYPTA--GN |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| - SNQNEGGCGEFTIFISTY--PGQ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ESDRLLNECIYIAPS--PGQ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| SDRLLNECIIYIAPT- - TGQ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| C I Y I A |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
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S M
 GGGEGPEEPALPSLEGVSEK ATL M L D M N L D T A SEKQY MSLNA SEKQY V N M

TTHSLI



Supplementary Fig. S1. Multiple alignment of different Ring1 proteins. The sequences are denoted by gene names and abbreviated species names. Numbers indicate amino acid residues. The amino acid residues conserved in $80 \%$ or more sequences were colored as follows: $K, R, H$ (blue); $D, E, N, Q(r e d) ; A, G, P, S, T$ (green); $C, I, L, M, V(y e l l o w) ; F, W, Y$ (orange). Species name abreviations: Aae: Aedes aegypti; Aga: Anopheles gambiae; Ame: Apis melifera; Bf1: Branchiostoma floridae; Dre; Danio rerio; Gga: Gallus gallus; Hsa: Homo sapiens; Mus: Mus musculus; Nve: Nematostella vectensis; Nvi: Nasonia vitripennis; Oan: Ornithorhynchus anatinus; Spu: Strongylocentrus purpuratus; Ssa: Salmo salar; Tca:Tribolium castaneum; Tni: Tetraodon nigroviridis; Xtr: Xenopus tropicales.

