

Table S12: Parsimonious age dating of *D. melanogaster* CTCF binding events

Boolean Conservation Score	Parsimony Reconstruction of Binding Events Evolutionary History	Age of <i>D.mel</i> binding
(1,1,1,1)	exist in the ancestor of the species	>25 Myr
(1,1,1,0)	exist in the ancestor , one loss event in the branch of <i>D.pseudoobscura</i>	>25 Myr
	one gain event after the split of <i>D.pse</i> and <i>melanogaster</i> group but before the split of <i>D.yak</i> and <i>melanogaster</i> subgroup	>6Myr, <25Myr
(1,1,0,1)	exist in ancestor , one loss event in the branch of <i>D.yak</i>	>25Myr
(1,0,1,1)	exist in ancestor, one loss event in the branch of <i>D.sim</i>	>25Myr
(1,1,0,0)	one gain event after the split of <i>D.yak</i> and the <i>melanogaster</i> subgroup but before split of <i>D.sim</i> and <i>D.mel</i>	>2.5Myr , <6Myr
(1,0,1,0)	one gain in the branch of <i>D.mel</i> , one gain in the branch of <i>D.yak</i>	<2.5Myr
	exist in ancestor, one loss in <i>D.pse</i> , one loss in <i>D.sim</i>	>25Myr
(1,0,0,1)	one gain in the branch of <i>D.mel</i> , one gain in the branch of <i>D.pse</i>	<2.5Myr
	exist in ancestor, one loss in <i>D.yak</i> , one loss in <i>D.sim</i>	>25Myr
(1,0,0,0)	one gain in the branch of <i>D.mel</i>	<2.5Myr