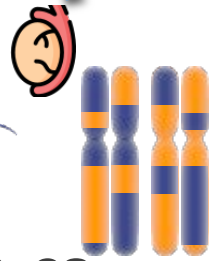


Six6os1^{Phe/Phe}

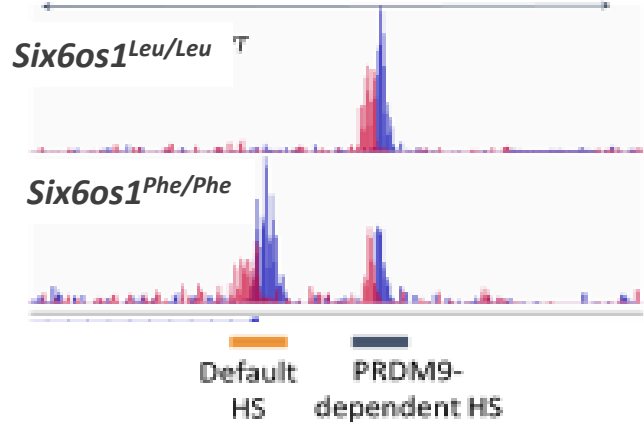


Fertile



↑ CO
↓ CO interference

30 kb



Activation of PRDM9-independent Hot spot
→ Molecular basis of increased CO frequency

Six6os1



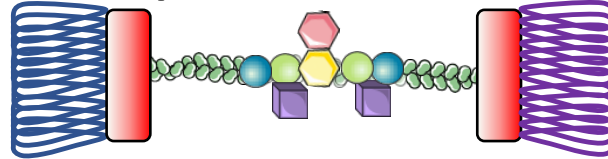
Phe524



rs1254319
p.Leu524Phe



SIX6OS1 is a structural component of the SC



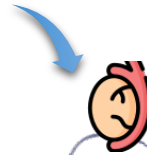
✓ Synapsis

✗ Bivalents

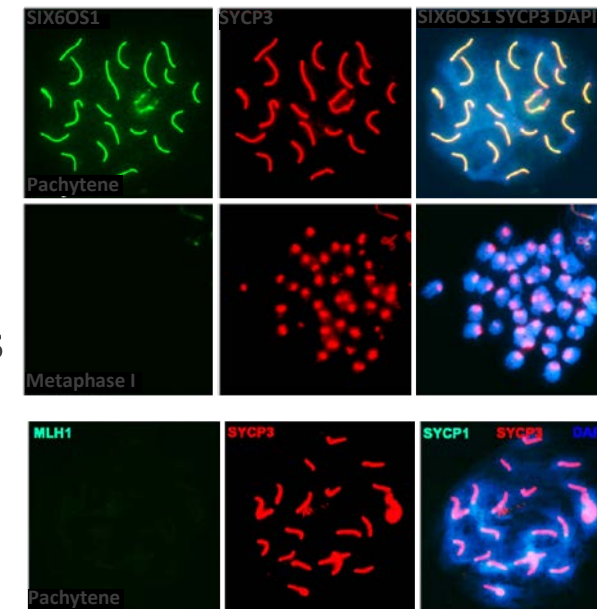
✓ Univalents

✗ Crossovers

Six6os1^{ΔCterm/ΔCterm}



Infertile



-Separate loss-of-function genetic model between synapsis and crossing over formation

-SIX6OS1-C-term is essential for CO formation but not for normal synapsis