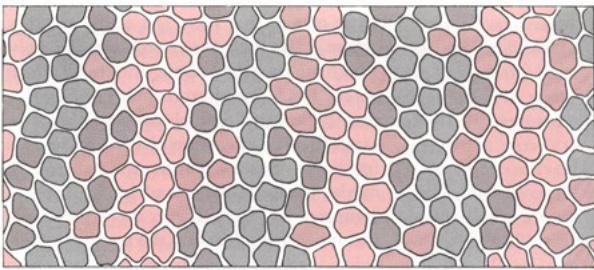# Developmental Biology
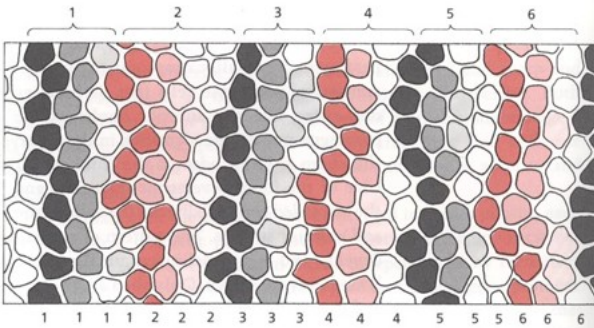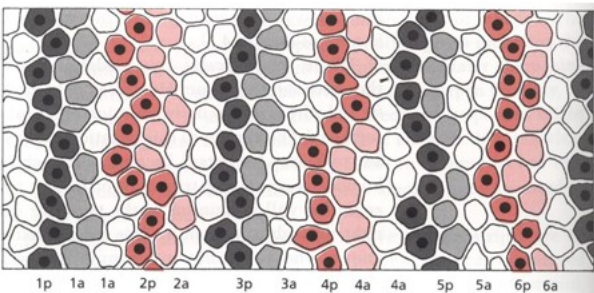
Pair-Rule Genes

Eve-ftz sorting
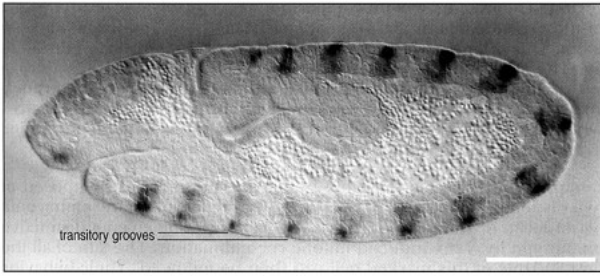

Eve-ftz sorting II
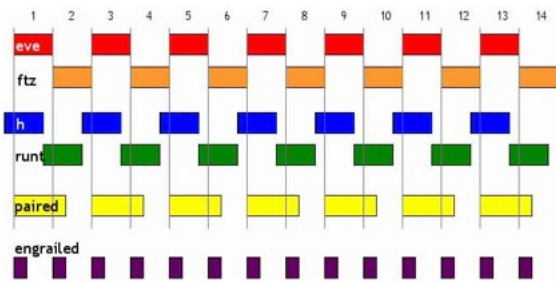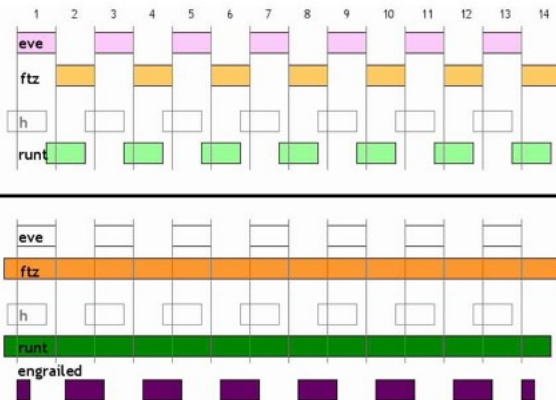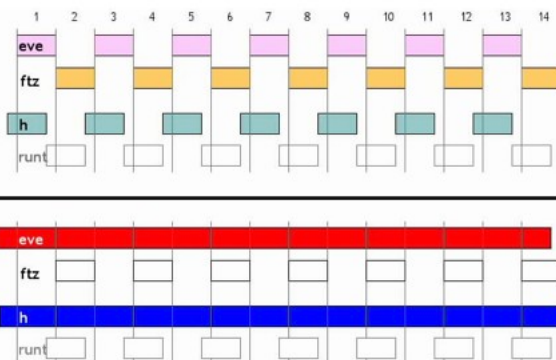

Eve-ftz + engrailed
(segment polarity)

engrailed

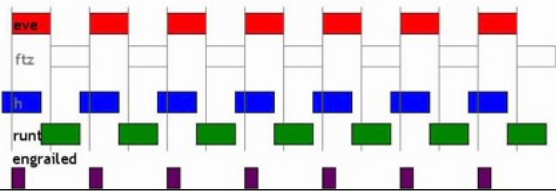transitory grooves

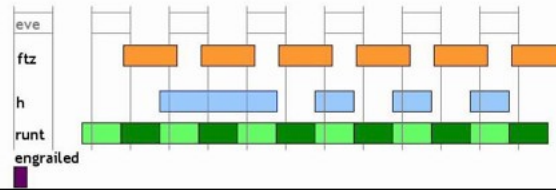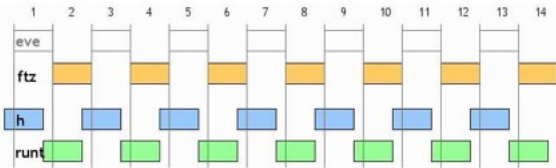## Pair-rule interactions I

Pair-rule interactions II - h-
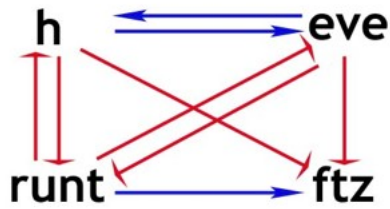

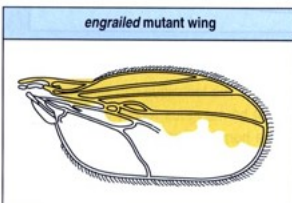## Pair-rule interactions III - runt-

Pair-rule interactions IV - ftz-
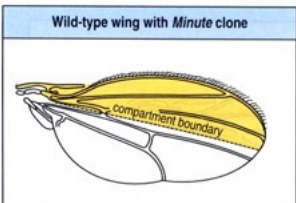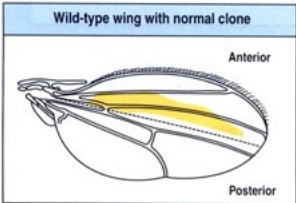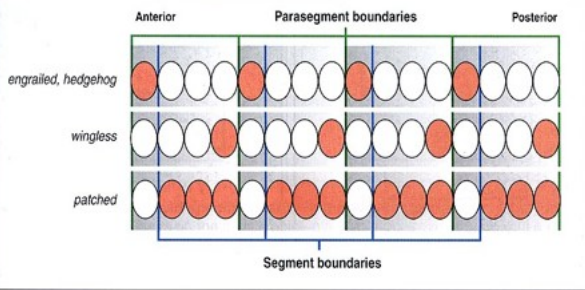

Pair-rule interactions V - eve-

Pair-rule interactions summary

Segment polarity function

Other SP genes

Anterior | Parasegment boundaries | Posterior

engrailed, hedgehog

wingless

patched

Segment boundaries

wingless

wingless (wg) and hedgehog (hh) feedback on each other; wg also promotes expression of engrailed (en)

In the absence of wg activity, expression of hh and en is lost—leading to a loss of segment polarity and pattern

epidermal cells

compartment boundary

segment