Ancestral chordate RD gene

duplication

Ancestral RUNX gene

triplcation

dup

Recombination

pufferfishes

zebrafish

tetrapods

tetraploidization 1

RX2
RX1
RT2
RT1
RUNT
RUNX1
RUNX3
RUNX2
conversion

tetraploidization 2

RUNT
RUNX1
RUNX2A
RUNX2B
RUNX3

RUNT
RUNX1
RUNX2
RUNX3

RUNT
RUNX1
RUNX2A
RUNX2B
RUNX3

RUNT
RUNX1
RUNX2
RUNX3

RUNT
RUNX1
RUNX2A
RUNX2B
RUNX3

RUNT
RUNX1
RUNX2
RUNX3

RUNT
RUNX1
RUNX2
RUNX3

RUNT
RUNX1
RUNX2
RUNX3