

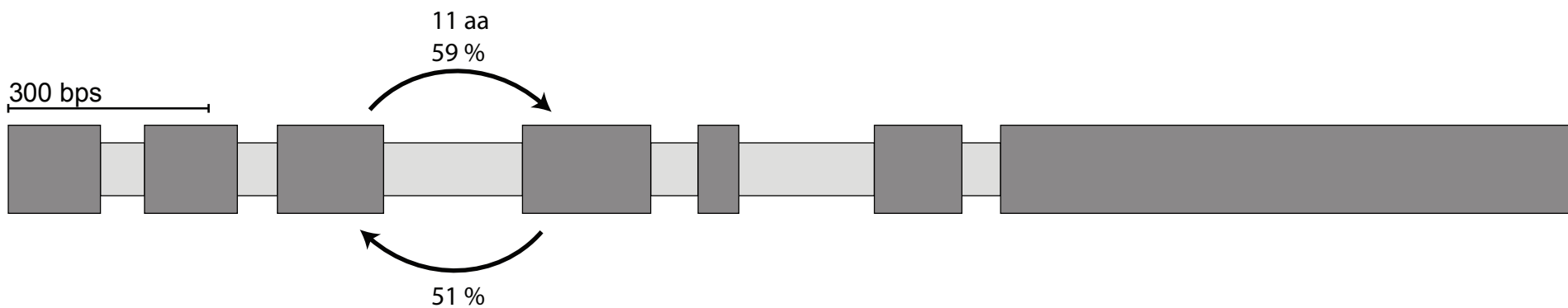
Search for non-mutually exclusive exons sharing similar length, same reading frame and sequence homology

All genes of the *Drosophila melanogaster* X chromosome containing at least two exons were collected based on the FlyBase annotation version 5.27. In all transcripts of the 1,705 genes neighboring exons were identified, which code for at least fifteen amino acids (minimal length 15aa), share high similarity (score $\geq 15\%$), have similar length (length difference ≤ 20 aa) and are in the same reading frame. The following table shows the six genes, which contain 21 of those exons distributed in 8 clusters. The figures show the detailed gene structure of those genes. The arrows indicate the length differences and scores of the similar exons.

Gene Name	Flybase ID	Exon hits per gene	Clusters per gene	Score %	Length difference [aa]
C901	FBgn0021742	2	1	51 – 59	11
CG15570	FBgn0029697	5	2	32 – 38	2 – 3
Ciboulot	FBgn0026084	2	1	30 – 35	8
Megalin	FBgn0261260	2	1	22	6
Tenascin accessory	FBgn0259240	3	1	27 – 36	5 – 8
Terribly reduced optic lobes	FBgn0261451	7	2	17 – 30	3 – 6
All 6 genes		21	8	17 – 59	2 – 11

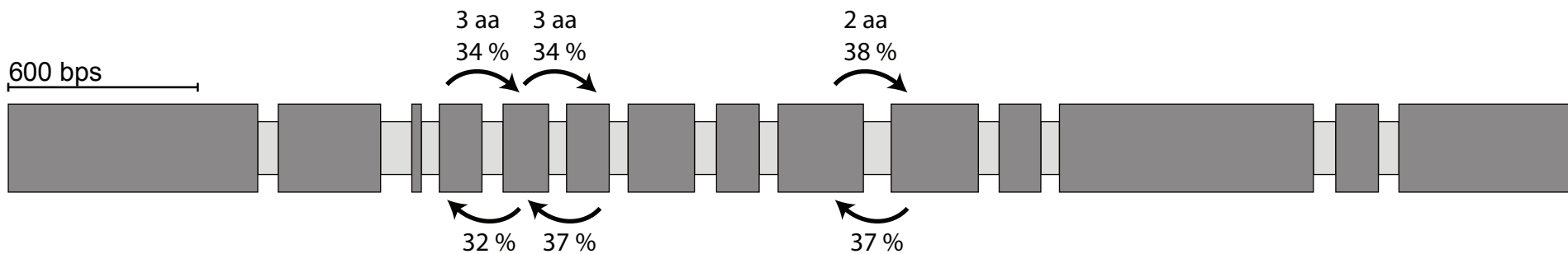
Gene: C901, FBgn0021742

Polypeptide: C901-PA, FBpp0073256



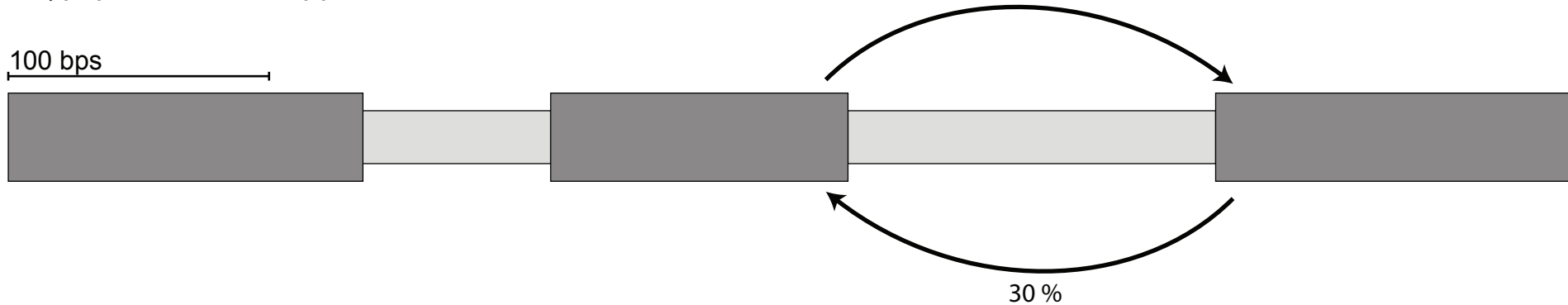
Gene: CG15570, FBgn0029697

Polypeptide: CG15570-PA, FBpp0070613



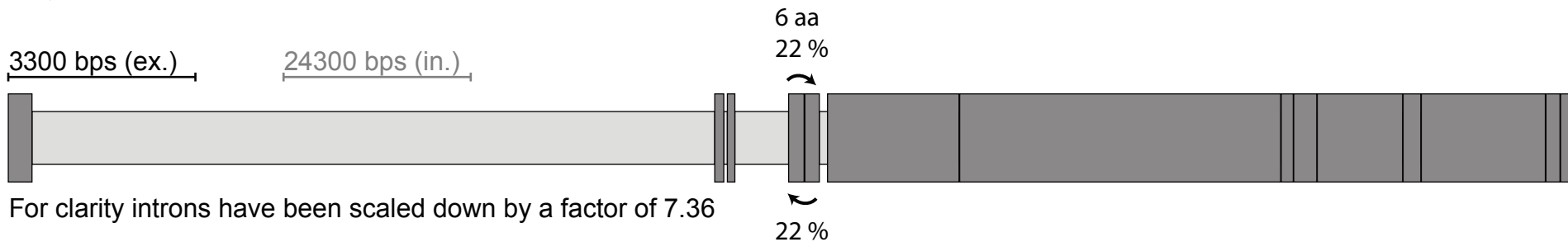
Gene: Ciboulot, FBgn0026084

Polypeptide: cib-PA, FBpp0070607



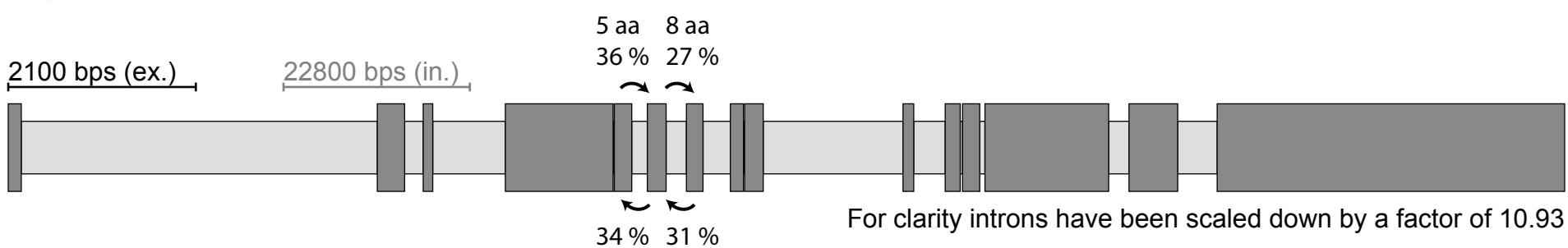
Gene: Megalin, FBgn0261260

Polypeptide: Megalin-PA, FBpp0291363



Gene: Tenascin accessory, FBgn0259240

Polypeptide: Ten-a-PD, FBpp0289136



Gene: Terribly reduced optic lobes, FBgn0261451

Polypeptide: trol-PD, FBpp0070440

