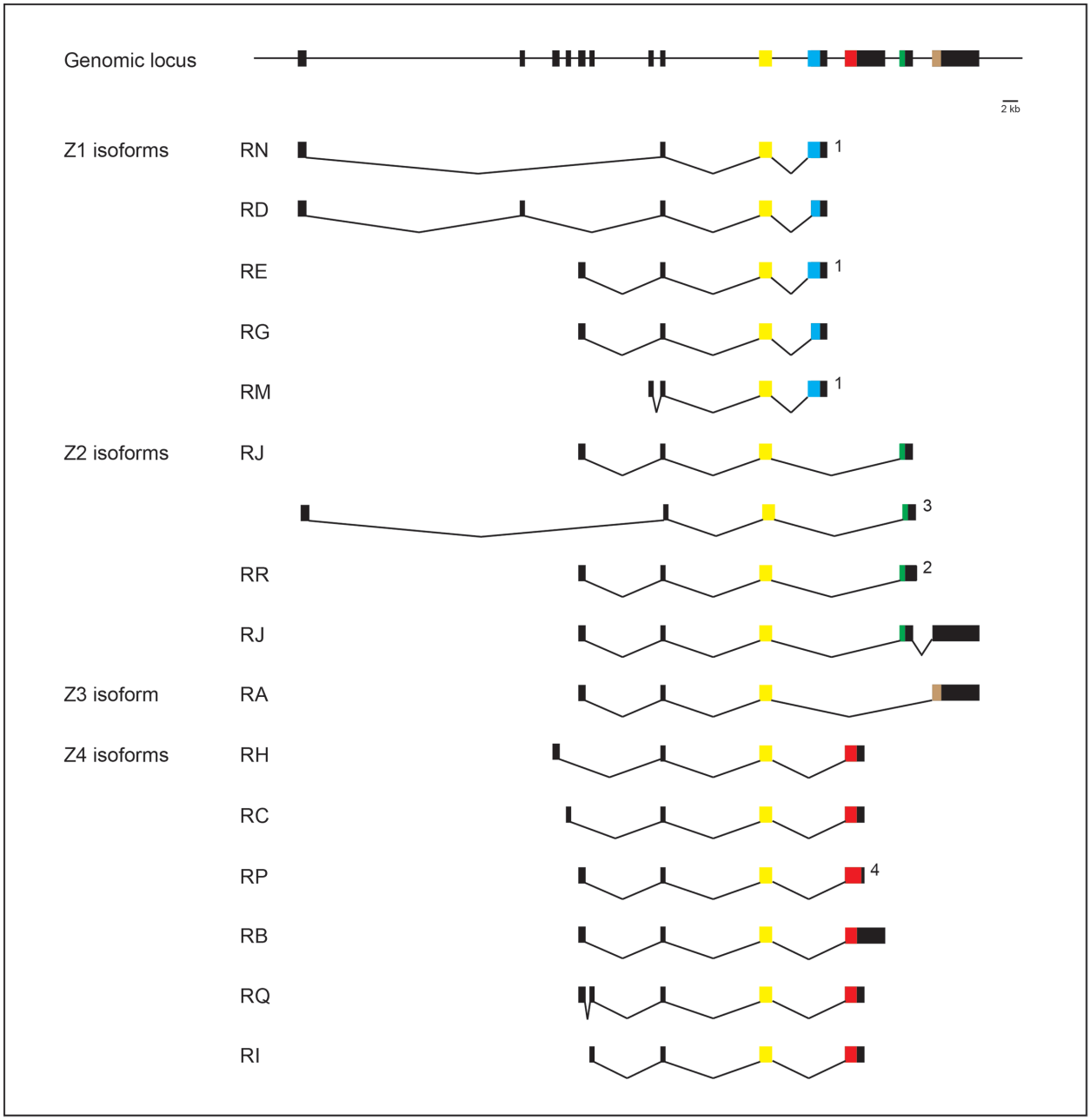
Genomic locus
2 kb
Z1 isoforms
RN
1
RD
RE
1
RG
RM
1
Z2 isoforms
RJ
3
RR
2
RJ
Z3 isoform
RA
Z4 isoforms
RH
RC
RP
4
RB
RQ
RI

Figure S1. Genomic structure and RNA isoforms of the *broad* locus. The *br* locus encodes four different DNA-binding transcription factors, each of which contains a shared core region (depicted in yellow), plus a unique zinc finger DNA-binding domain (depicted in blue, green, brown and red for Z1, Z2, Z3 and Z4, respectively) (DiBello *et al.*, 1991; Bayer *et al.*, 1996). According to FlyBase, these transcription factors are encoded by a total of 15 *br* isoforms that encode 6 proteins (Thurmond *et al.*, 2019). Each isoform has a core domain spliced to one of the 4 zinc finger DNA binding domain, but four of the isoforms make a larger protein because of an extension of the zinc finger domain as described below. Gene isoforms *br-RN, br-RD, br-RE, br-RG, and br-RM* encode the Z1 transcription factor, with isoforms *br-RE*, *br-RM*, and *br-RN* encoding an additional 61 amino acids between the core region and the originally published Z1 sequence (noted by 1) (DiBello *et al.*, 1991; Thurmond *et al.*, 2019). Gene isoforms *br-RJ*, *br-RL*, and *br-RR* encode the Z2 transcription factor, with *br-RR* also encoding an additional 130 amino acids at the C-terminal end of the originally published sequence, presumably due to stop codon suppression (noted by 2) (DiBello *et al.*, 1991; Thurmond *et al.*, 2019). The unnamed isoform between *br-RJ* and *br-RR* is transcribed from the upstream promoter and is supported by cDNA mapping presented in (DiBello *et al.*, 1991) (noted by 3). Gene isoform *br-RA* encodes the Z3 transcription factor, while gene isoforms *br-RB*, *br-RC*, *br-RH*, *br-RI*, *br-RP*, and *br-RQ* encode the Z4 transcription factor, with *br-RP* encoding an additional 131 amino acids at the C-terminal end of the originally published sequence (noted by 4) (DiBello *et al.*, 1991; Bayer *et al.*, 1996; Thurmond *et al.*, 2019). The probes for the northern blot shown in figure 5 were made against the core region (highlighted in yellow) and the Z-2 isoform (highlighted in green).