



Figure 5. Homology-dependent inhibition of IES excision by the maternal macronucleus. (A) During development of wild type, IES (yellow and green bars) are excised efficiently. (B) Transformation of the maternal macronucleus with a high copy number of an IES (initial transformants = Generation t) can inhibit the elimination of the homologous IES during the subsequent (Generation $t+1$, and future) rounds of new macronuclear differentiation. (C) Similar transformation with the IES⁻ form of the gene does not change the wild-type rearrangement. (D) Transformation with IESs lacking flanking sequences results in inhibition of IES excision.