

Figure S10

**Search for recombination events between** *msg* **families.** The most sensitive method TOPALi based on the Hidden Markov Model was used. Two genes of one family and two of another family were analyzed together. All combination of *msg* families and different members of each family were investigated. Members of families IV and VI could be compared only to each other because of their size smaller than members of the other families preventing proper alignment. All results were similar to the two examples shown.

**a,** *msg*32 and 24 of family I plus *msg*104 and 76 of family II. **b,** *msg*53 and 46 of family III plus *msg*101 and 54 of family V.