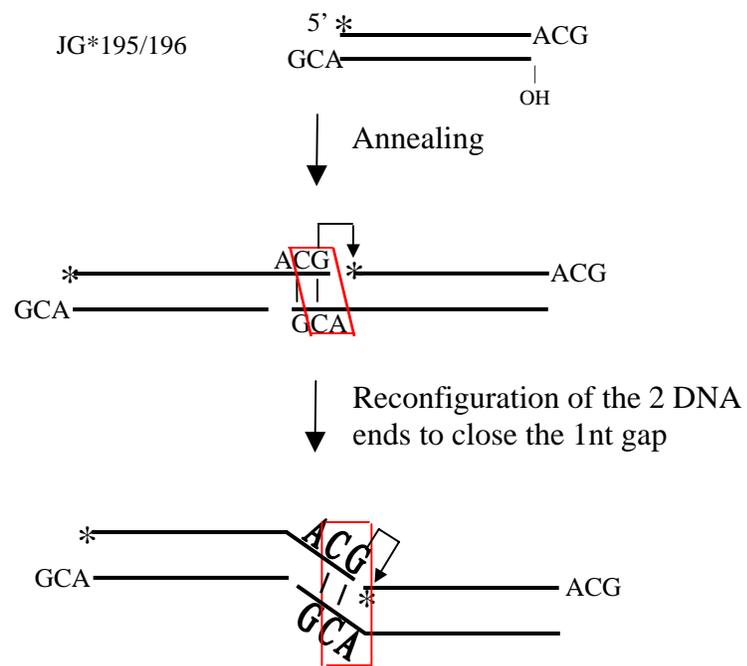
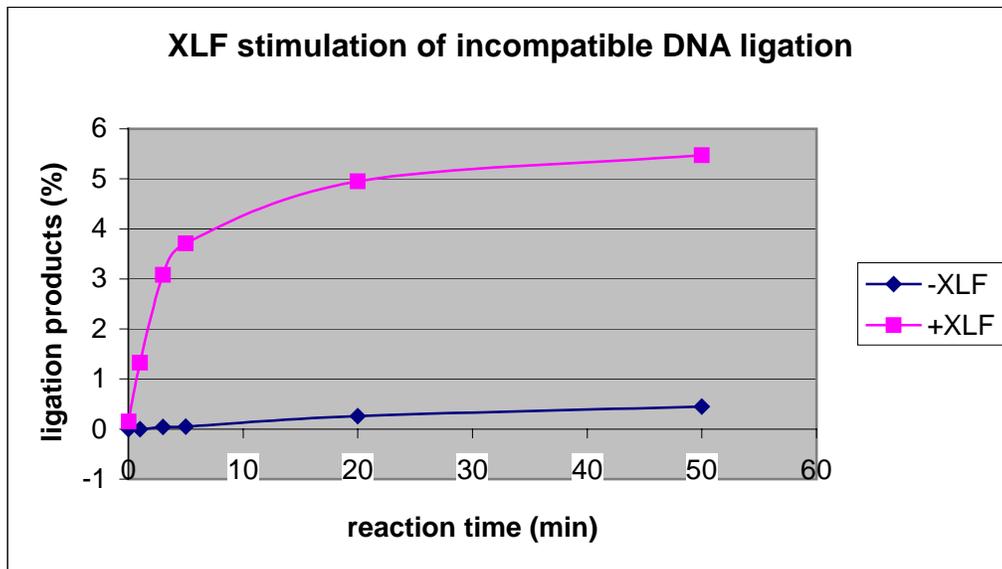


C.

| Ligation efficiency as a function of DNA sequence | | | | |
|---|------------|-------|-------|------------------|
| Lane No. | Substrate | -XLF | +XLF | Fold Stimulation |
| 1,2 | JG*195/196 | 0.68% | 2.1% | 3.1 |
| 3,4 | JG*196/195 | 0.27% | 0.43% | 1.6 |
| 5,6 | JG*197/198 | 3.6% | 14% | 3.9 |
| 7,8 | JG*198/197 | 1.3% | 8.8% | 6.8 |
| 9,10 | JG*197/166 | 3.7% | 9.6% | 2.6 |
| 11,12 | JG*166/197 | 1.1% | 15% | 14 |
| 13,14 | JG*163/198 | 14% | 25% | 1.8 |
| 15,16 | JG*198/163 | 1.4% | 3.7% | 2.6 |



Suppl. Fig. 2



Suppl. Fig. 3

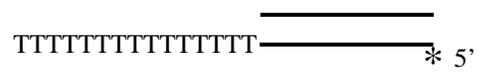
A.

JG169: TTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTTT 30mer

YM145: TTTTTTTTTTTTTTTTTTTTTT 20mer

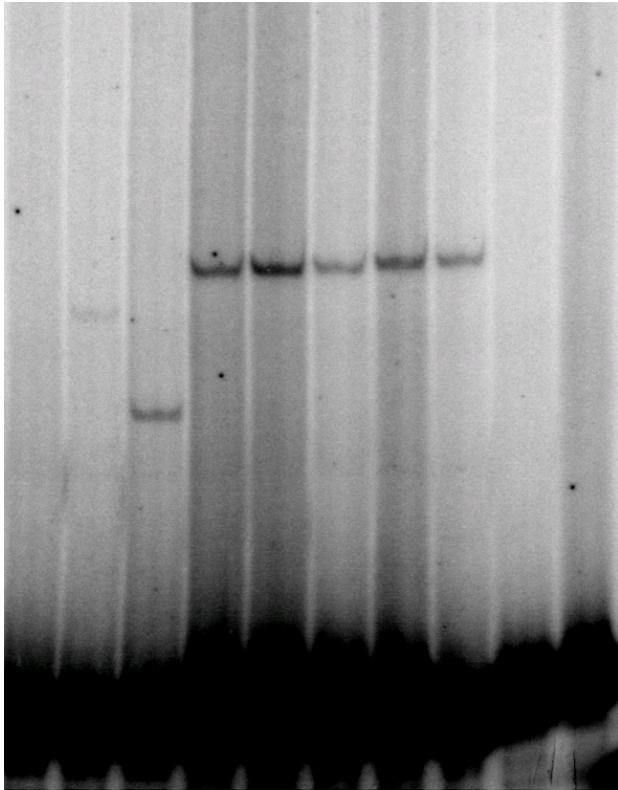
YM*130/YM68

YM*149/YM68



B.

| | | | | | | | | | | |
|--------|---|---|---|---|---|---|---|---|---|----|
| X4/LIV | + | + | + | + | + | + | + | + | + | + |
| Ku | - | - | - | - | + | - | + | - | - | - |
| XLF | - | - | - | - | - | + | + | - | - | - |
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |



| Lane No. | Substrate | Lane No. | Substrate |
|----------|---------------------------|----------|---------------------------|
| 1 | YM*130/YM68 | 6 | YM*130/YM68 + YM*149/YM68 |
| 2 | YM*130/YM68 + JG169 | 7 | YM*130/YM68 + YM*149/YM68 |
| 3 | YM*130/YM68 + YM145 | 8 | YM*130/YM68 + YM149/YM68 |
| 4 | YM*130/YM68 + YM*149/YM68 | 9 | YM*149/YM68 |
| 5 | YM*130/YM68 + YM*149/YM68 | 10 | YM*149/YM68 + YM130/YM68 |

Suppl. Fig. 4