

iii) **Strains for Transformation** (selectable markers in **bold**)

- A964 EK134 cspA1; (I) *acrA1* *brnA2*; (III) *choA101*; (VIII) ***niaD2*** (008.1.2)  
 A965 EK140 cspA1; (I) *olvA1*; (III) *bioB2*; (IV) *leuA1*; (VIII) ***niaD2*** (016.1.2)  
 A966 EK141 cspA1; (I) *fwnA1*; (III) *lysA7*; (VI) *pdxA2*; (VIII) ***niaD2*** (016.1.11)  
 A967 EK157 cspA1; (I) *acrA1brnA2*; (III) ***pyrG5***; (V) *metB11*; (VII-VIII) *cnxC5*; *crnB12*<sub>(90%)\*</sub> (025.2.17)  
 A968 EK185 cspA1; (I) *acrA1 brnA2*; (III) ***pyrG5***; (VI) *pdxA2*; (VII) ***nicB5*** (042. 2.8)  
 A969 EK182 cspA1; (I) *fwnA1*; (III) ***pyrG5***; (V) *metB10* (041. 5.2)  
 A970 EK187 cspA1; (I) *fwnA1*; (III) ***pyrG5*** *choA101*; (VI) *pdxA2*; (VII) ***nicB5*** (042.4.5)  
 A971 EK184 cspA1; (I) *brnA2*; (III) ***pyrG5*** ; (V) *metB10*; (VII) ***nicB5*** (041.5.5)  
 A972 EK191 cspA1; (I) *acrA1 brnA2*; (III) ***pyrG5***; (VIII) ***niaD2*** (043. 7.5)  
 A973 EK199 cspA1; (I-III) *fwnA1*; *fpaD19*; *lysA14*; (VI) *pdxA2*; (VII) ***nicB101*** SG2n(037.1.6)  
 A974 EK210 cspA1; (I) *fwnA1*; (IV) *leuA1*; (VI) *pdxA2*; (VII) ***sftC101***(se<sup>r</sup>) (X-ray of EK146)  
 A975 EK219 cspA1; (I) (*acrA1*) *brnA2*; (II) *fpaD19*; (IV) *leuA1*; (VII) *oliC2* ***sftC101***; (VIII) *crnB12* (052.4.5)  
 A976 EK221 cspA1; (I) *fwnA1*; (II) *fpaD19*; (III) *choA101*; (VI) *pdxA2*; (VII) ***sftC101***; (VIII) *crnB12* (052.4.18)  
 A977 EK222 cspA1; (I) *fwnA1*; (IV) *leuA1*; (VI) *pdxA2*; (VII) *oliC2* ***sftC101***; (VIII) *crnB12* (052.4.6)

\* *crnB* is not identifiable in presence of *cnxC*, but most likely present, because marker in repulsion is absent.

iv) **Mapping strains** (markers on all 8 chromosomes in most cases)

- A978 EK138 cspA1; (I-VIII) (*acrA1*) *brnA2*; *argH12*; *choA101*; *ntrB3*; *metB11*; *pdxA2*; *oliC2*; *crnB12* (023.2.9)  
 A979 EK192 cspA1; (I-VIII) *fwnA1*; *fpaD19*; *lysA14*; *ntrB3*; *metB11*; *pdxA2*; *oliC2*; *crnB12* (032.2.22)  
 A980 EK194 cspA1; (I-VIII) *fwnA1*; *fpaD19*; *choA101*; *ntrB3*(?); *metB11*; *pdxA2*; *oliC2*; *crnB12* (032.1.11)  
 A981 EK201 cspA1; (I-VII) (*acrA1*) *brnA2*; *fpaD19*; *choA101*; *thiB101*\*; *metB11*; *pdxA2*; *oliC2* (036. 4.12)  
 A982 EK223 cspA1; (I-VIII) *fwnA1*; *fpaD19*; *choA101*; *thiB101*; *metB11*; *pdxA2*; *oliC2*; *crnB12* (051.3.21)  
 A983 EK224 cspA1; (I-VIII) (*acrA1*) *brnA2*; *fpaD19*; *lysA14*; *ntrB3* *thiB101*\*; *metB11*; *pdxA2*; *oliC2*; *crnB12* (051.5.22)  
 A984 EK225 cspA1; (I-VIII) *fwnA1*; *fpaD19*; *lysA14*; *ntrB3*; *metB11*; *pdxA2*; *oliC2*; *crnB12* (051.4.6)  
 A985 EK226 cspA1; (I-VIII) (*acrA1*) *brnA2*; *fpaD19*; *choA101*; *thiB101*\*; *metB11*; *pdxA2*; *oliC2*; *crnB12* (051.5.22)

\* Mapping of *thiB* on IV to be confirmed; tests of *ntrB* (on IV) improved in presence of *crnB* if NH<sub>4</sub> is added