Gene Engineering Division
RIKEN BioResource Research Center

RIKEN DNA BANK

host name : RF21

● **Clone ID** : RDB _ 15959

● **Lot** : 15959 _ A8Ea

● **Form** : Recombinant in Stab agar

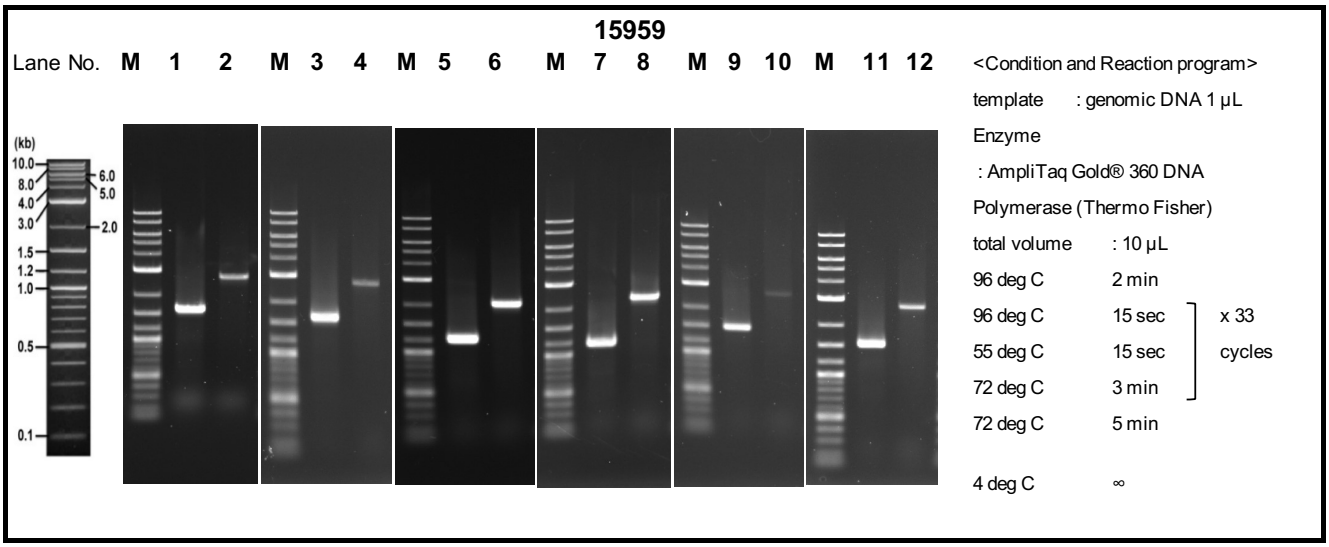
● **Culture** : 37C, LB (Free)

Use appropriate media when using for experiments.

● **Primers** Please refer to depositor's primer list (**PMID: 26577727, Table 4**) for primer sequences.

Primer A	:	aspC.ext.F	(Pr 686)	Primer K	:	yfdZ(alaC).Ext.F	(Pr 786)
Primer B	:	aspC.ext.R	(Pr 687)	Primer L	:	yfdZ(alaC).Ext.R	(Pr 787)
Primer C	:	tyrB.ext.F	(Pr 688)	Primer M	:	-	-
Primer D	:	tyrB.ext.R	(Pr 689)	Primer N	:	-	-
Primer E	:	ilvE.extF	(Pr 682)	Primer O	:	-	-
Primer F	:	ilvE.extR	(Pr 683)	Primer P	:	-	-
Primer G	:	avtA.extF	(Pr 680)	Primer Q	:	-	-
Primer H	:	avtA.extR	(Pr 681)	Primer R	:	-	-
Primer I	:	yfbQ(alaA).Ext.F	(Pr 784)	Primer S	:	-	-
Primer J	:	yfbQ(alaA).Ext.R	(Pr 785)	Primer T	:	-	-

● **PCR Amplification** The lane to which the 250ng/well 1kb Plus Ladder (NEB#N3200) marker is applied is indicated as **(M)**.

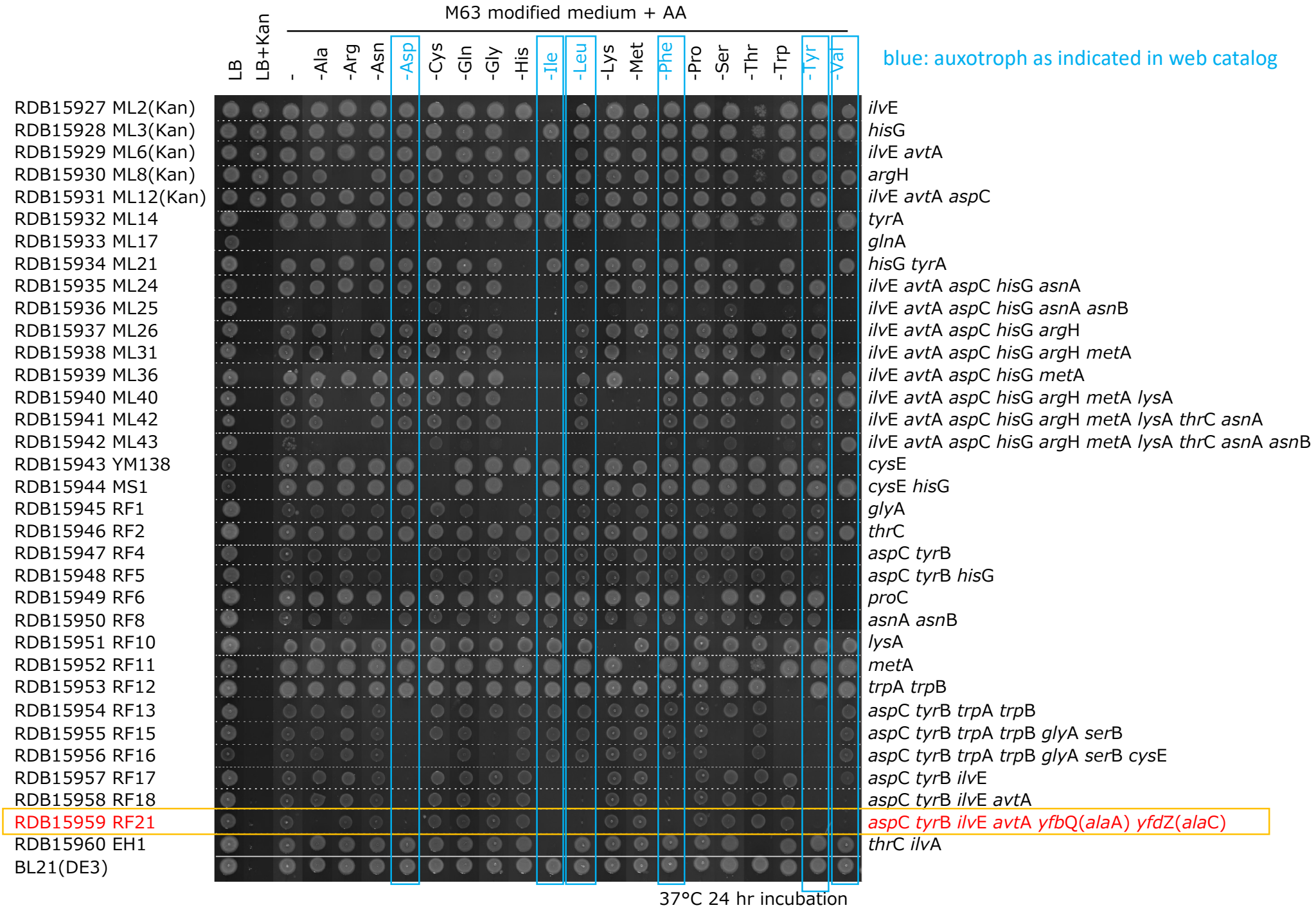


◆ **Lane number and size of fragment** BL21(DE3) has used as a control.

Confirmed deletion / Templete		***aspC*** Primer A + B	***tyrB*** Primer C + D	***ilvE*** Primer E + F	***avtA*** Primer G + H	***yfbQ(alaA)*** Primer I + J
host	**RDB15959**	(1), 1.6 kb	(3), 1.6 kb	(5), 1.2 kb	(7), 1.2 kb	(9), 1.5 kb
	BL21(DE3)	(2), 2.8 kb	(4), 2.8 kb	(6), 2.1 kb	(8), 2.4 kb	(10), 2.7 kb

Confirmed deletion		***yfdZ(alaC)*** Primer K + L	**-**	**-**	**-**	**-**
host	**RDB15959**	(11), 1.5 kb	-	-	-	-
	BL21(DE3)	(12), 2.7 kb	-	-	-	-

GED, RIKEN BRC, Nov. 20 2026


M63 modified medium + AA
LB
LB+Kan
-
-Ala
-Arg
-Asn
-Asp
-Cys
-Gln
-Gly
-His
-Ile
-Leu
-Lys
-Met
-Phe
-Pro
-Ser
-Thr
-Trp
-Tyr
-Val
blue: auxotroph as indicated in web catalog
RDB15927 ML2(Kan) — ilvE
RDB15928 ML3(Kan) — hisG
RDB15929 ML6(Kan) — ilvE avtA
RDB15930 ML8(Kan) — argH
RDB15931 ML12(Kan) — ilvE avtA aspC
RDB15932 ML14 — tyrA
RDB15933 ML17 — glnA
RDB15934 ML21 — hisG tyrA
RDB15935 ML24 — ilvE avtA aspC hisG asnA
RDB15936 ML25 — ilvE avtA aspC hisG asnA asnB
RDB15937 ML26 — ilvE avtA aspC hisG argH
RDB15938 ML31 — ilvE avtA aspC hisG argH metA
RDB15939 ML36 — ilvE avtA aspC hisG metA
RDB15940 ML40 — ilvE avtA aspC hisG argH metA lysA
RDB15941 ML42 — ilvE avtA aspC hisG argH metA lysA thrC asnA
RDB15942 ML43 — ilvE avtA aspC hisG argH metA lysA thrC asnA asnB
RDB15943 YM138 — cysE
RDB15944 MS1 — cysE hisG
RDB15945 RF1 — glyA
RDB15946 RF2 — thrC
RDB15947 RF4 — aspC tyrB
RDB15948 RF5 — aspC tyrB hisG
RDB15949 RF6 — proC
RDB15950 RF8 — asnA asnB
RDB15951 RF10 — lysA
RDB15952 RF11 — metA
RDB15953 RF12 — trpA trpB
RDB15954 RF13 — aspC tyrB trpA trpB
RDB15955 RF15 — aspC tyrB trpA trpB glyA serB
RDB15956 RF16 — aspC tyrB trpA trpB glyA serB cysE
RDB15957 RF17 — aspC tyrB ilvE
RDB15958 RF18 — aspC tyrB ilvE avtA
RDB15959 RF21 — aspC tyrB ilvE avtA yfbQ(alaA) yfdZ(alaC)
RDB15960 EH1 — thrC ilvA
BL21(DE3)
37°C 24 hr incubation