

Table S1. Overview of bacterial bioprospection. Colonies obtained and strains isolated

Colony	Halo chromium reduction on solid medium (mg/L)					New strain code
	15	25	50	75	100	
LB01	+	+	+	-	-	QRePLB01
LB02	+	+	-	-	-	QRePLB02
LB03	+	-	-	-	-	-
LB04	g <sup>-</sup>	-	-	-	-	-
LB13	g <sup>-</sup>	g <sup>-</sup>	-	-	-	QRePLB13
LB14G2	+	-	-	-	-	-
LB17G2	+	+	+	-	-	-
LB0197G4	+	+	+	-	-	-
LB0198G3	+	+	+	-	-	-
LB22	+	-	-	-	-	-
LB22R	+	-	-	-	-	-
LB31	+	-	-	-	-	-
LB33	+	+	+	-	-	QRePLB33
33AC*	ND	+	+	+	+	QReMLB33A
33BB*	ND	ND	ND	ND	ND	QReMLB33D
33CB*	ND	ND	ND	ND	ND	QReMLB33C
33CC*	ND	ND	ND	ND	ND	-
LB39	g <sup>-</sup>	-	-	-	-	-
LB53RG3	+	+	+	-	-	-
LB63	+	+	-	-	-	-
LB72G2	+	+	+	-	-	-
LB77	+	-	-	-	-	-
LB00E	ND	ND	ND	ND	ND	QRePLB00E
LBC3-1	ND	ND	ND	ND	ND	QRePLBC31
LBC3-4	ND	ND	ND	ND	ND	QRePLBC34
NB14G3	+	+	+	-	-	-
NB21	+	-	-	-	-	QRePNB21
NB22	+	-	-	-	-	-
NB24	+	+	+	-	-	-
NB25G3	+	+	+	-	-	-
NB25RG3	+	+	+	-	-	-
NB26	+	-	-	-	-	-
NB43	+	-	-	-	-	-
NB47	+	-	-	-	-	-
NB53	+	-	-	-	-	-
NB53G4	+	+	+	+	-	QRePNB53
R2A29	+	+	-	-	-	-
R2A30	+	+	-	-	-	-
R2A31	+	+	-	-	-	QRePRA31
R2A44	+	+	+	+	-	-
R2A54	+	-	-	-	-	-
R2A55	+	+	+	+	-	QRePRA55
R2A56	+	+	-	-	-	-
R2A57	+	+	-	-	-	-
44CC**	ND	ND	ND	ND	ND	QReMLB44C
55A***	ND	+	+	+	+	QReMLB55A
55B***	ND	ND	ND	ND	ND	QReMLB55B

Classification of Cr(VI) reduction according to the halo formed with ortho-dianisidine: (g-) growth was observed but not the reduction's halo.

(-) halo was not observed; (+) reduction halo observed; (ND) No determined.

Colonies from the other colonies: (\*) from LB33, (\*\*) from R2A44, (\*\*\*) From R2A55