Supplementary Table 1. Recovery of Zn^{2+} from *E. coli* strain MG1655 following growth in Zn^{2+}-replete and Zn^{2+}-limited batch culture.

An expansion of the Zn^{2+} recovery calculations shown in Figure 2. This shows amount of Zn (mg) in the pellets, wash solutions, supernatants and media from various runs of the chemostat. "Volume harvested" shows the volume of culture harvested (ml). An equivalent volume was used to calculate the Zn present in the medium at the start of culture.

[a] sum of amount of Zn found in pellet, wash 1, wash 2, wash 3 and supernatant (mg).

[b] % recovery is the amount of Zn found in the pellet, wash solutions and supernatant (summed) divided by that found in the medium.

Flask 1 (+Zn)	volume harvested[a]	24.5
	pellet	4.50×10^{-5}
	wash 1	1.60×10^{-4}
	wash 2	1.00×10^{-5}
	wash 3	5.00×10^{-6}
	supernatant	5.39×10^{-3}
	SUM[a]	5.61×10^{-3}
	medium	5.39×10^{-3}
	% recovery[b]	**104**
Flask 2 (+Zn)	volume harvested[a]	24
	pellet	5.50×10^{-5}
	wash 1	1.95×10^{-4}
	wash 2	1.25×10^{-5}
	wash 3	1.50×10^{-5}
	supernatant	5.28×10^{-3}
	SUM[a]	5.56×10^{-3}
	medium	5.28×10^{-3}
	% recovery[b]	**105**
Flask 3 (+Zn)	volume harvested[a]	23
	pellet	5.50×10^{-5}
	wash 1	1.50×10^{-4}
	wash 2	1.25×10^{-5}
	wash 3	5.00×10^{-6}
	supernatant	5.06×10^{-3}
	SUM[a]	5.28×10^{-3}
	medium	5.06×10^{-3}
	% recovery[b]	**104**
Flask 4 (-Zn)	volume harvested[a]	24

	pellet	2.50×10^{-5}
	wash 1	3.40×10^{-5}
	wash 2	2.50×10^{-6}
	wash 3	2.50×10^{-6}
	supernatant	4.80×10^{-5}
	SUM[a]	1.12×10^{-4}
	medium	2.40×10^{-5}
	% recovery[b]	**467**
Flask 5 (-Zn)	volume harvested[a]	24
	pellet	2.50×10^{-5}
	wash 1	4.25×10^{-5}
	wash 2	7.50×10^{-6}
	wash 3	2.50×10^{-6}
	supernatant	4.80×10^{-5}
	SUM[a]	1.26×10^{-4}
	medium	2.40×10^{-5}
	% recovery[b]	**523**
Flask 6 (-Zn)	volume harvested[a]	22.5
	pellet	3.50×10^{-5}
	wash 1	4.05×10^{-5}
	wash 2	5.00×10^{-6}
	wash 3	2.50×10^{-6}
	supernatant	4.50×10^{-5}
	SUM[a]	1.28×10^{-4}
	medium	2.25×10^{-5}
	% recovery[b]	**569**

Supplementary Table 2. Recovery of Zn^{2+} from *E. coli* strain MG1655 following growth in a Zn^{2+}-replete and a Zn^{2+}-limited chemostat.

An expansion of the recovery calculations shown in Table 3. This shows amount of Zn (mg) in the pellets, wash solutions, supernatants and media from various runs of the chemostat. "Volume harvested" shows the volume of culture harvested (ml). An equivalent volume was used to calculate the Zn present in the medium at the start of culture.

[a] sum of amount of Zn found in pellet, wash 1, wash 2, wash 3 and supernatant (mg).

[b] % recovery is the amount of Zn found in the pellet, wash solutions and supernatant (summed) divided by that found in the medium.

Washed pellets					
	+Zn			-Zn	
Run 1	volume harvested[a]	37.5		volume harvested[a]	30
	pellet	7.15×10^{-4}		pellet	1.50×10^{-4}
	wash 1	3.18×10^{-4}		wash 1	2.50×10^{-4}
	wash 2	6.25×10^{-5}		wash 2	3.75×10^{-5}
	wash 3	2.50×10^{-5}		wash 3	1.75×10^{-5}
	supernatant	1.20×10^{-2}		supernatant	6.60×10^{-4}
	SUM[a]	1.31×10^{-2}		SUM[a]	1.12×10^{-3}
	medium	1.22×10^{-2}		medium	6.00×10^{-5}
	% recovery[b]	**107.65**		**% recovery[b]**	**1858.33**
Run 2	volume harvested[a]	35		volume harvested[a]	35
	pellet	7.50×10^{-5}		pellet	6.05×10^{-4}
	wash 1	2.93×10^{-4}		wash 1	7.00×10^{-4}
	wash 2	5.00×10^{-5}		wash 2	1.50×10^{-4}
	wash 3	1.75×10^{-5}		wash 3	5.50×10^{-5}
	supernatant	1.16×10^{-2}		supernatant	7.70×10^{-4}
	SUM[a]	1.20×10^{-2}		SUM[a]	2.28×10^{-3}
	medium	1.13×10^{-2}		medium	1.40×10^{-4}
	% recovery[b]	**106.65**		**% recovery[b]**	**1628.57**
Run 3	volume harvested[a]	86		volume harvested[a]	81
	pellet	6.90×10^{-4}		pellet	3.00×10^{-5}
	wash 1	4.03×10^{-4}		wash 1	2.63×10^{-4}
	wash 2	3.70×10^{-4}		wash 2	2.40×10^{-4}
	wash 3	8.25×10^{-5}		wash 3	5.00×10^{-5}
	supernatant	2.88×10^{-2}		supernatant	3.23×10^{-4}
	SUM[a]	3.03×10^{-2}		SUM[a]	9.06×10^{-4}
	medium	2.88×10^{-2}		medium	1.62×10^{-4}
	% recovery[b]	**105.20**		**% recovery[b]**	**558.95**

Run 4	volume harvested[a]	40.5		volume harvested[a]	42
	pellet	6.50×10^{-5}		pellet	7.50×10^{-5}
	wash 1	3.40×10^{-4}		wash 1	3.05×10^{-4}
	wash 2	6.75×10^{-5}		wash 2	5.50×10^{-5}
	wash 3	1.75×10^{-5}		wash 3	1.50×10^{-5}
	supernatant	1.33×10^{-2}		supernatant	3.78×10^{-4}
	SUM[a]	1.38×10^{-2}		SUM[a]	8.28×10^{-4}
	medium	1.33×10^{-2}		medium	1.68×10^{-4}
	% recovery[b]	**103.68**		**% recovery[b]**	**492.86**
Run 5	volume harvested[a]	40		volume harvested[a]	37.5
	pellet	2.36×10^{-5}		pellet	3.76×10^{-5}
	wash 1	4.02×10^{-4}		wash 1	3.11×10^{-4}
	wash 2	4.29×10^{-5}		wash 2	5.93×10^{-5}
	wash 3	7.75×10^{-6}		wash 3	1.01×10^{-5}
	supernatant	1.42×10^{-2}		supernatant	6.47×10^{-4}
	SUM[a]	1.47×10^{-2}		SUM[a]	1.06×10^{-3}
	medium	1.43×10^{-2}		medium	4.30×10^{-4}
	% recovery[b]	**103.05**		**% recovery[b]**	**247.79**
Unwashed pellets					
Run 4	volume harvested[a]	40.5		volume harvested[a]	42
	pellet	4.45×10^{-4}		pellet	3.85×10^{-4}
	supernatant	1.32×10^{-2}		supernatant	3.78×10^{-4}
	SUM[a]	1.36×10^{-2}		SUM[a]	7.63×10^{-4}
	medium	1.33×10^{-2}		medium	1.68×10^{-4}
	% recovery[b]	**102.43**		**% recovery[b]**	**454.17**
Run 5	volume harvested[a]	40		volume harvested[a]	37.5
	pellet	5.18×10^{-4}		pellet	4.17×10^{-4}
	supernatant	1.41×10^{-2}		supernatant	6.76×10^{-4}
	SUM[a]	1.46×10^{-2}		SUM[a]	1.09×10^{-3}
	medium	1.43×10^{-2}		medium	4.30×10^{-4}
	% recovery[b]	**102.57**		**% recovery[b]**	**254.36**

Supplementary Figure 1

Growth of MG1655 *E. coli* in GGM containing EDTA (filled circles, solid line) and GGM lacking EDTA (open circles, dashed line) in batch culture. In each case, means and standard deviations of three flasks are plotted.