

**Table 2.** Functional lifetimes of mRNA during exponential growth in LB medium and in the presence of rifampicin

Operon	Promoter, genes	mRNA Probe	Funct. life (minutes)		Decay mode Rifampicin
			Expon.	Rifampicin	
<i>lac</i>	P <sub>lac</sub> - <i>lacZ</i>	5'- <i>lacZ</i>	2.4 <sup>a</sup>	2.4 <sup>b</sup>	Exponential
<i>spc</i>	P <sub>spc</sub> - <i>rplN-rplX-rplE</i>	<i>rplN</i>	6.0 <sup>c</sup>	2.8 <sup>d</sup>	Exponential
<i>spc</i>	P <sub>spc</sub> - <i>rplN-rplX-rplE</i>	<i>rplX</i>	6.0 <sup>e</sup>	1.6 <sup>f</sup>	Exponential
<i>spc-lac</i>	P <sub>spc</sub> - <i>rplN-lacZ</i>	5'- <i>lacZ</i>	2.4 <sup>g</sup>	2.4→∞ <sup>h</sup>	Stable after two minutes
<i>spc-lac</i>	P <sub>spc</sub> - <i>rplN-lacZ</i>	<i>rplN</i>	2.4 <sup>i</sup>	2.4→∞ <sup>j</sup>	Stable after two minutes

<sup>a</sup> Inferred from the induction kinetics in Figure 2(b) and (d); see the text.

<sup>b</sup> Inferred from Figure 3(d), circles and broken curve.

<sup>c</sup> Calculated:  $2.5 \times 2.4$  minute = 6 minutes; see the text for rationale.

<sup>d</sup> Inferred from Figure 4(a), circles.

<sup>e</sup> During exponential growth, the lifetimes of all *spc* mRNAs are assumed to be equal.

<sup>f</sup> Inferred from Figure 6.

<sup>g</sup> Inferred from Figure 5(d); the initial decay in the presence of rifampicin is assumed to reflect the decay during exponential growth.

<sup>h</sup> Inferred from Figure 5(d).

<sup>i</sup> The decay of *rplN* mRNA is assumed to be linked to the decay of the downstream *lacZ* mRNA.

<sup>j</sup> Inferred from Figure 4(a) and (b), broken curve.