

Fluorometry Protocol

Midori Green was tried first but consistent results could not be obtained.

A linear regression was obtained using EtBr, however the EtBr was re-dissolved from an old bottle so the concentration is unknown.

Emission value of **605nm** was chosen based on the paper by Bonasera et. al. 2007 (doi: 10.2144/000112500). They used a maximum of 250nm but here **300nm** was observed.

Linear Regression using Lambda DNA (100ul dilutions)

	Lambda DNA (300ng/ul)	10mM Tris Buffer pH 7.6	EtBr Buffer
Buffer (no DNA)	0	90	10
6 ng/ul	2	88	10
12 ng/ul	4	86	10
24 ng/ul	8	82	10
36 ng/ul	12	78	10
48 ng/ul	16	74	10

Formula: $y=16.608x + 130.7$

$R^2: 0.98331$

Sample DNA Dilutions

	Sample DNA	10mM Tris Buffer pH 7.6	EtBr Buffer
DSM 40763	5	85	10
S.gal	5	85	10
H021	5	85	10
PGAG4	5	85	10
P5	3	87	10