**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 R2: 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 |