

Quantitation of green fluorescent protein using a gel-based imaging method.

ABSTRACT

Green fluorescent protein (GFP) is a versatile reporter protein and has been widely used in biological research. However, its quantitation requires expensive equipment such as a spectrofluorometer. In the current study, a gel documentation imaging system using a native polyacrylamide gel for the quantitation of GFP was developed. The assay was evaluated for its precision, linearity, reproducibility, and sensitivity in the presence of *Escherichia coli* cells and was compared with the spectrofluorometric method. Using this newly established, gel-based imaging technique; the amount of GFP can be quantified accurately.

Keyword: Green fluorescent protein; Electrophoresis; Purification.