BFP mRNA — Quality-Verified Blue Fluorescent Reporter

BFP mRNA (Blue Fluorescent Protein mRNA) enables clear blue fluorescence (~443 nm) for visualizing gene expression, protein localization, and live-cell processes. It is well suited for transient expression applications, including cell labeling, tracking, and multiplex imaging. Croyez offers both unmodified and modified BFP mRNA. The modified version is produced by in vitro transcription with a Cap 1 structure, poly(A) tail, and optimized nucleotides to enhance stability and reduce innate immune responses. All electrophoretic and capillary electrophoresis data shown below are generated using the modified BFP mRNA.

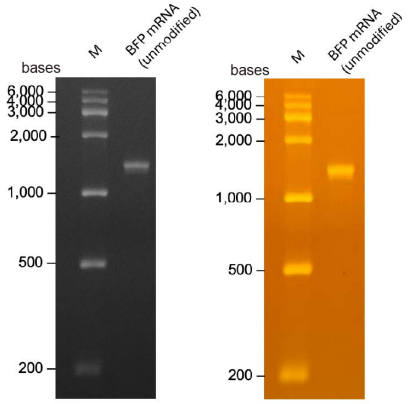


Figure1. BFP mRNA (unmodified) was analyzed on a 2% E-Gel. Marker : Croyez RNA ladder (cat no: CR00004)

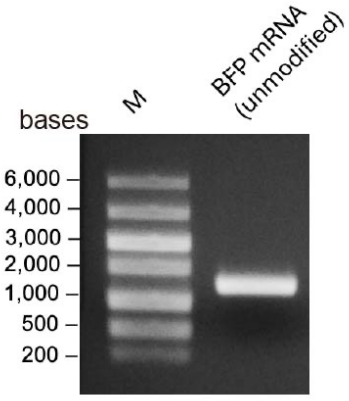


Figure 2. 100 ng RNA 65°C loading 6 µL to 1% TAE agarose gel, 120 V 25 min

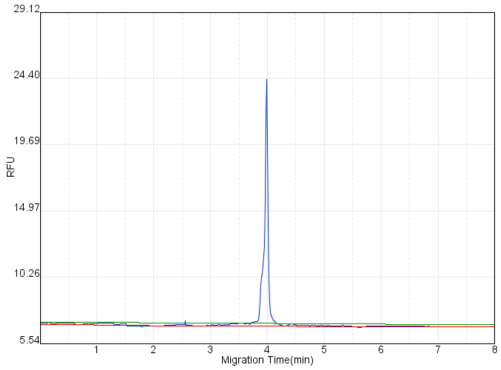
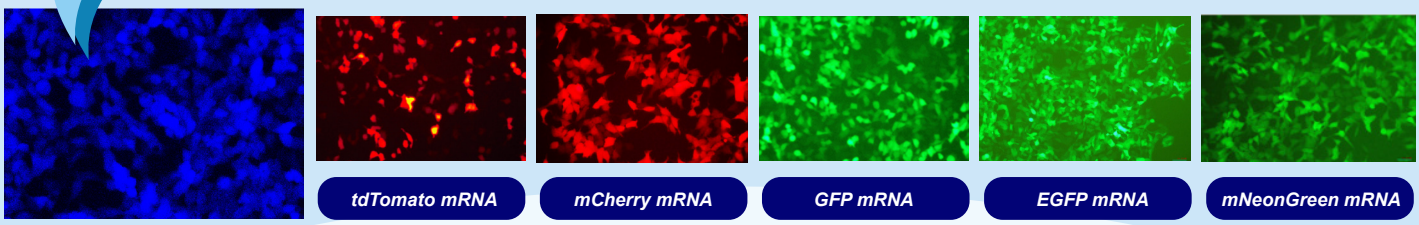
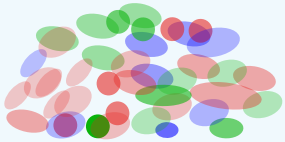


Figure 3. Capillary Electrophoresis BFP mRNA (unmodified) was analyzed by capillary electrophoresis.



Why Choose BFP mRNA?

Distinct Spectral Channel

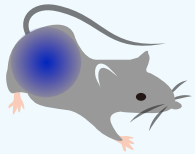


BFP emits in the blue range (~440–460 nm), giving a well-separated channel from GFP and RFP for multicolor imaging with minimal spectral overlap.

Established Use in Multicolor FRET & Imaging

BFP has historically been used as a matched partner with other fluorescent proteins in multicolor and FRET studies to expand the imaging toolkit.

Useful for Complex Biological Models



BFP expression has been successfully used in advanced cell and organism models to enable enhanced microscopy when combined with GFP/RFP markers.

Cat#	Product	Package
CR00023	BFP mRNA (unmodified)	100 µg / 1 mg
CR00022	BFP mRNA (m1ψ substitution)	100 µg / 1 mg