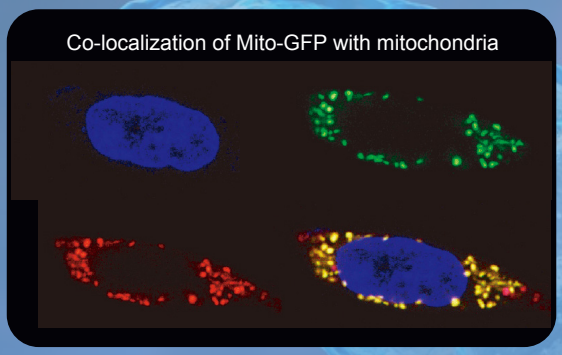
Visualize Mitochondria in Live Cells with Mito-GFP mRNA



Mito-GFP mRNA encodes a mitochondria-targeted GFP reporter that enables precise fluorescent labeling of mitochondria in live cells.After transfection, GFP fused with a mitochondrial targeting signal (MTS) localizes specifically to mitochondria, allowing researchers to monitor mitochondrial morphology and dynamics such as movement, fusion, and fission.This tool supports studies of mitochondrial function, disease mechanisms, and drug responses in cell biology research.

Data

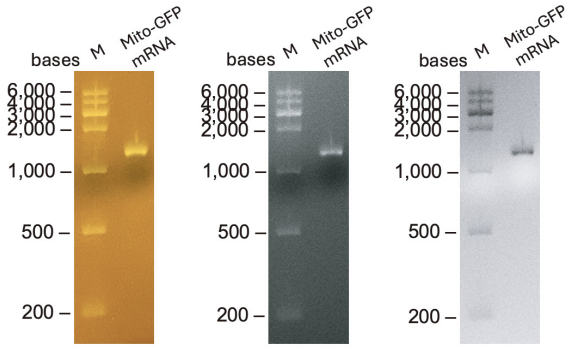


Figure 1:
Mito-GFP mRNA (m1 ψ substitution) was analyzed on a 2% E-Gel.
Lane 1: Marker, RNA ladder (cat no: CR00004).
Lane 2: Mito-GFP mRNA (m1 ψ substitution)

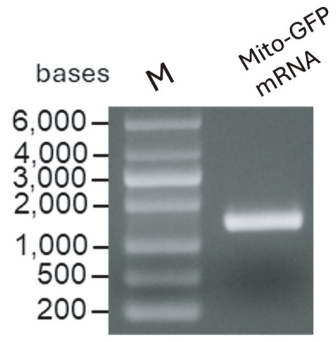


Figure 2:
Mito-GFP mRNA (m1 ψ substitution) was analyzed on a 1% TAE agarose gel at 100 V for 30 minutes.
Lane 1: Marker, RNA ladder (cat no: CR00004).
Lane 2: Mito-GFP mRNA (m1 ψ substitution)

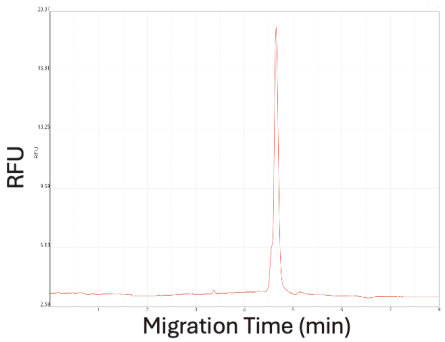
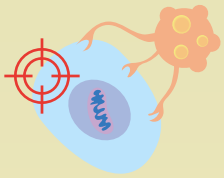


Figure 3:
Capillary Electrophoresis
High-Resolution capillary electrophoresis separation of Mito-GFP mRNA

Applications

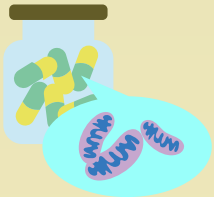
Studying Mitochondrial Dynamics

Researchers can track mitochondrial movement, fusion, and fission events in live cells, which are crucial for understanding mitochondrial function and cellular health.



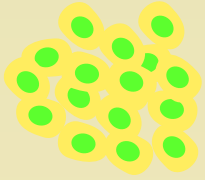
Investigating Disease Mechanisms

Mito GFP can be employed to explore mitochondrial dysfunction in diseases such as neurodegeneration, cancer, and metabolic disorders.



Drug Testing

The fluorescent marker allows for the assessment of drug effects on mitochondrial morphology and function, aiding in the development of therapeutic strategies.



Co-localization Studies

Mito GFP can be used in conjunction with other fluorescent markers to study co-localization with other organelles, such as the endoplasmic reticulum or lysosomes, providing a comprehensive view of cellular interactions.

Cat#	Product	Package
CR00047-100UG	Mito-GFP mRNA (m1ψ substitution)	100 µg
CR00047-1MG	Mito-GFP mRNA (m1ψ substitution)	1 mg

CROYEZ Bioscience
Accelerating life science research with high-quality molecular biology tools.
info@croyezbio.com
www.croyezbio.com