

## PRODUCT INFORMATION

 **$\beta$ -galactosidase mRNA (unmodified)**

v. 241201

<b>Catalog number</b>	CR00034-100UG / CR00034-1MG
<b>Package</b>	100 $\mu$ g / 1 mg
<b>Description</b>	<p><math>\beta</math>-Galactosidase is a glycoside hydrolase enzyme that catalyzes the hydrolysis of terminal, non-reducing <math>\beta</math>-D-galactose residues in <math>\beta</math>-D-galactosides. The <math>\beta</math>-galactosidase assay is widely used in genetics, molecular biology, and other life science fields. The activity of <math>\beta</math>-galactosidase can be detected using X-gal, a synthetic substrate that produces a characteristic blue dye upon cleavage by the enzyme.</p> <p>Croyez' s <math>\beta</math>-Galactosidase mRNA was generated through <i>in vitro</i> transcription, and these mRNAs are then fortified at their 5' end by modified nucleotide capping, known as Cap1. To mimic the characteristics of fully processed mature mRNAs, we incorporate a poly(A) tail at the 3' end and optimize the mRNAs to enhance stability and overall performance. This ensures that the mRNAs function similarly to naturally occurring mature mRNAs in cells.</p>
<b>mRNA length</b>	3443 nt
<b>Base Composition</b>	Unmodified bases
<b>Concentration</b>	1.0 mg/ mL
<b>Cap Modification</b>	Cap 1 structure
<b>Poly A tail</b>	Yes
<b>Form</b>	Liquid
<b>Buffer</b>	1 mM sodium citrate buffer, pH 6.4.
<b>Storage</b>	<p>Products can be stored at <math>-80^{\circ}\text{C}</math> or below.</p> <p>We recommend to aliquot the mRNA solution for a better storage. Avoid repeated freeze/thaw cycles.</p>
<b>Shipping</b>	The products are shipped on dry ice and should be avoided for freeze-thaw cycles.
<b>Application</b>	Reporter Genes

*For Research Use Only. Not for use in diagnostic or therapeutic procedures.*