PRODUCT INFORMATION

Cre mRNA

v. 260302

Catalog number	CR00045-100UG / CR00045-1MG
Package	100 µg / 1 mg
Description	Cre recombinase is a 38 kDa site-specific recombinase derived from P1 bacteriophage that catalyzes precise DNA recombination between pairs of 34 bp loxP recognition sites, enabling efficient deletion, inversion, or insertion of floxed DNA segments in eukaryotic genomes. As a gold-standard tool for genome engineering, the Cre/loxP system is widely used to perform conditional knockouts, knock-ins, and cell-lineage tracing in cultured cells and diverse animal models. Cre mRNA is engineered for optimal performance. Manufactured via *in vitro* transcription (IVT), our mRNA features a Cap1 structure and a Poly(A) tail to mimic natural mature mRNA, ensuring superior stability and translation efficiency. Furthermore, the incorporation of modified nucleotides significantly reduces innate immune responses, enabling high-level expression and safer application in diverse cell types.
mRNA length	1612 nt
Base Composition	Unmodified bases
Concentration	1.0 mg/ mL
Cap Modification	Cap 1 structure
Poly A tail	Yes
Form	Liquid
Buffer	1 mM sodium citrate buffer, pH 6.4.
Storage	Products can be stored at -80°C or below.We recommend to aliquot the mRNA solution for a better storage. Avoid repeated freeze/thaw cycles.
Shipping	The products are shipped on dry ice and should be avoided for freeze-thaw cycles.
Application	Gene editing

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