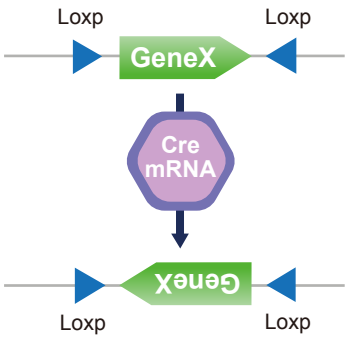
CROYEZ

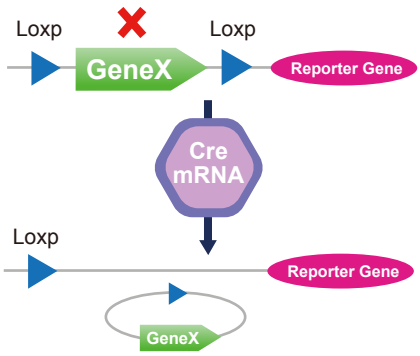
Enable Conditional Gene Knockout with Cre mRNA

Cre mRNA is a site-specific recombinase system that enables precise DNA recombination through Cre-LoxP interactions, supporting gene knockout, inversion, and lineage tracing in diverse experimental models. Manufactured via optimized IVT processes, our Cre mRNA incorporates Cap1 structure and a Poly(A) tail to enhance stability and translation efficiency, while modified nucleotides reduce innate immune responses for reliable expression in both in vitro and in vivo applications.

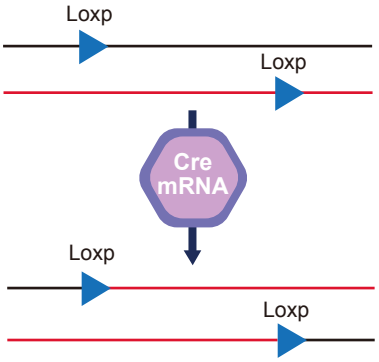
Inversion



Deletion



Translocation



Data

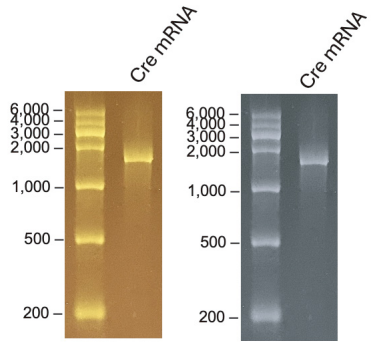


Figure 1. Cre mRNA was analyzed on a 2% E-Gel.Lane 1: Marker,RNA ladder (cat no: CR00004)Lane 2: Cre mRNA (unmodified)

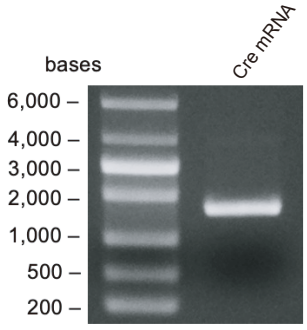


Figure 2. Cre mRNA was analyzed on a 2% TAE agarose gel at 100 V for 30 minutes. Lane 1: Marker,RNA ladder (cat no: CR00004).Lane 2: Cre mRNA (unmodified)

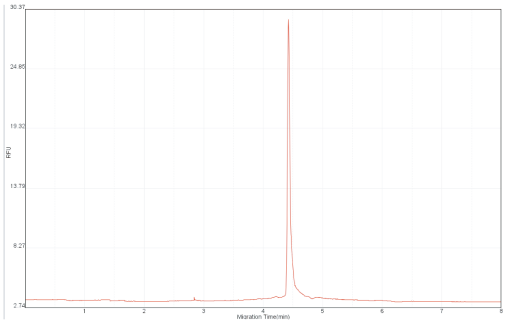
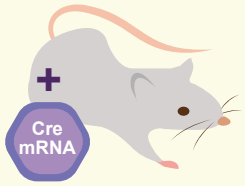


Figure 3. Capillary Electrophoresis Cre mRNA was analyzed by capillary electrophoresis

Conditional Gene Knockout

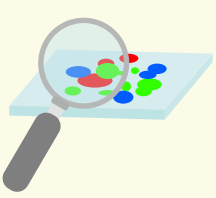


Floxed allele combined with tissue-specific Cre enables targeted gene deletion in specific organs or cell populations.

Temporal Gene Control

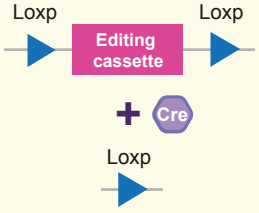
CreERT2 systems allow gene deletion to be activated at specific developmental stages or after drug induction.

Cell Lineage Tracing



Cre-mediated activation of reporter alleles enables tracking of cell lineage and fate during development or disease

Removal of Editing or Selection Cassettes



Inducible Cre systems can excise editing or selection elements while preserving the desired genomic

Cat#	Product	Package
CR00045	Cre mRNA	100 µg / 1 mg
CR00046	Cre mRNA (m1ψ substitution)	100 µg / 1 mg