

# KRISHZYME™ Enzymes for mRNA Vaccine

## Vaccinia Capping Enzyme

This product is the Vaccinia Capping Enzyme recombinantly expressed in E. coli. Vaccinia Capping Enzyme can add the 7-methylguanosine cap (Cap0) to the 5' terminus of mRNA. This structure can improve the stability of mRNA, and is indispensable to subsequent transport and translation.

Cat No	Composition	Storage Temperature (°C)	Product ID/Specification	
			KNB9002S (500U)	KNB9002L (2000U)
KNB9002-I	Vaccinia Capping Enzyme (10U/ul)	-20	50 ul	200 ul
KNB9002-II	Capping Buffer	-20	100 ul	1000 ul
KNB9002-III	S-adenosylmethionine (SAM 32mM)	-20	100 ul	1000 ul
KNB9002-IV	GTP	-20	50 ul	500 ul

10X Capping Buffer contains: 0.5M Tris-HCl (pH 8.0), 50mM KCl, 10mM

### Product Properties

Optimal reaction temperature: 37°C

Definition of active unit: 1 active unit is defined as the amount of enzyme needed to incorporate 10 pmol of ( $\alpha^{32}\text{P}$ )GTP into 80nt transcript within 1h at 37°C.

### Quality Control

Purity  $\geq$  95%

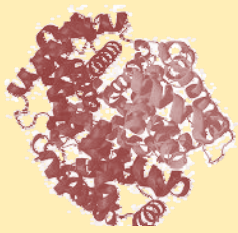
Residual Host Cell DNA  $\leq$  100pg/mg

Residual Host Cell Protein  $\leq$  50 ppm

Residual Endotoxin  $\leq$  10 EU/mg

No residual RNase, Endonuclease, Exonuclease or Protease

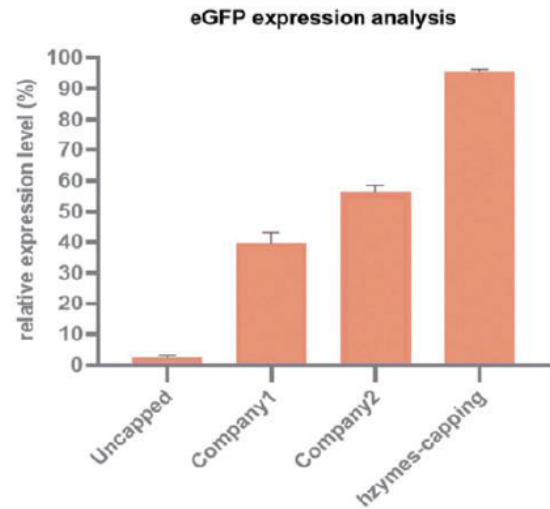
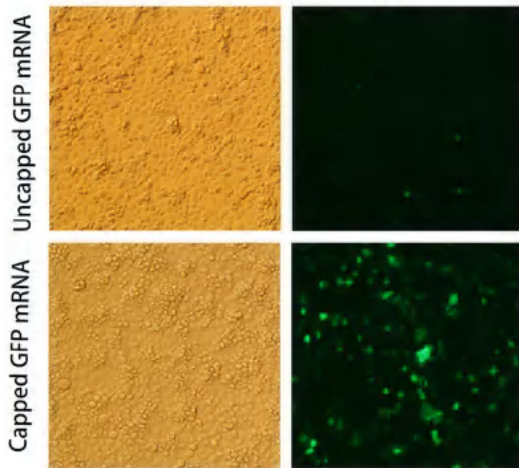
Germ-free, Pathogen-free.



# KRISHZYME™ Enzymes for mRNA Vaccine

## Product Features

Capping rate as high as 95%; the 5'-Cap structure effectively promoting the in vivo expression of mRNA.



## Product Information

Cat No	Composition	Specification
KNB9002	Vaccinia Capping Enzyme	500 U, 2000 U

## Other KRISHZYME mRNA Vaccine Enzymes Available

Cat No	Product Particulars
KNB9001	T7 RNA Polymerase
KNB9003	mRNA Cap-2'-O-Methyltransferase
KNB9004	Poly(A) Polymerase
KNB9005	RNase inhibitor
KNB9006	DNase I
KNB9007	RNase III
KNB9008	T4 RNA ligase
KNB9009	Pyrophosphatase Inorganic
KNB9010	Alkaline Phosphatase
KNB9011	EcoR I