

# KRISHZYME™ Enzymes for mRNA Vaccine

## T7 Polymerase

This product is the phage T7 RNA Polymerase derived from recombinant expression in E. coli. It can specifically recognize the T7 promoter sequence, and synthesize RNA complementary to downstream single-stranded DNA of the promoter using the single or double stranded DNA containing the sequence of T7 promoter as the template and NTP as the substrate.

Cat No	Composition	Storage Temperature	Product ID/Specification	
			KNB9001S (5KU)	KNB9001L (50KU)
KNB9001-I	T7 RNA Polymerase (50 U/ul)	-20	100 ul	1000 ul
KNB9001-II	Buffer	-20	400 ml	4000 ml

1X Buffer contains: 40 mM Tris HCl (pH7.9), 6mM MgCl<sub>2</sub>, 1mM DTT and 2mM spermidine, 10mM NaCl.

### Product Properties

Optimal Reaction Temperature: 37°C

Definition of Active Unit: 1 active unit is defined as the amount of enzyme needed to incorporate 1 nmol of [3H] GMP into acid-insoluble precipitate within 1h under the conditions of 37°C and pH8.0.

### Quality Control

Purity ≥ 95%

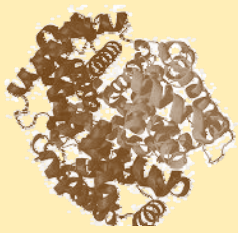
Residual Host Cell DNA ≤ 100 pg/mg

Residual Host Cell Protein ≤ 50 ppm

Residual Endotoxin ≤ 10 EU/mg

No residual RNase, Endonuclease, Exonuclease or Protease

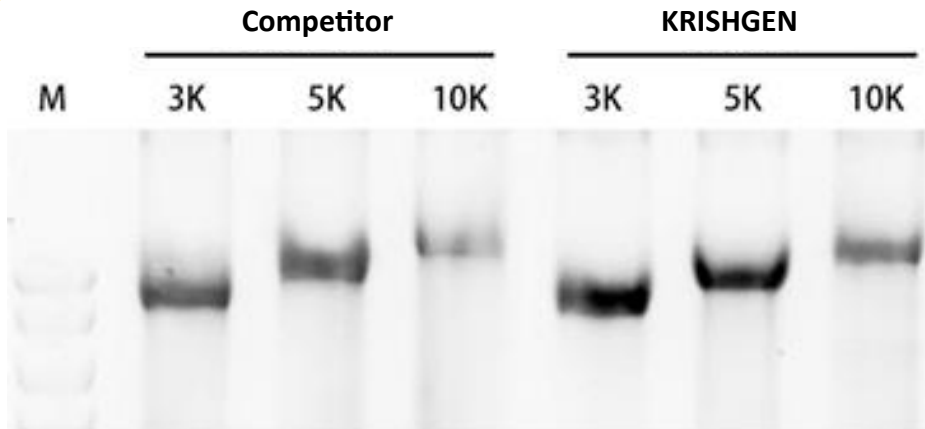
Germ-free, Pathogen-free.



# KRISHZYME™ Enzymes for mRNA Vaccine

## Product Features

Excellent RNA output rate; homogeneous transcript length; transcript length up to 10K.



## Product Information

Cat No	Composition	Storage Temperature	Specification
KNB9001	T7 RNA Polymerase	-20	5KU, 50KU

## 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