

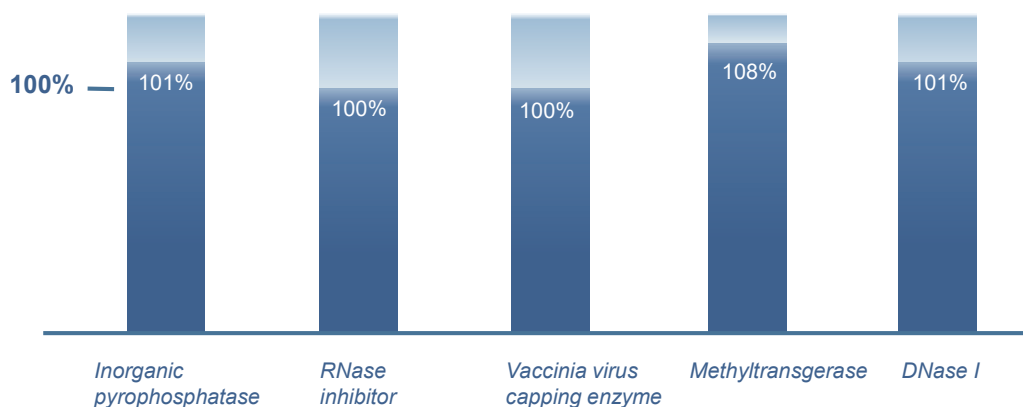
T7 RNA Polymerase ELISA Kit

Driving New Standards in mRNA Vaccine Quality Control

Product Overview

This kit uses the double antibody sandwich method, featuring a microwell plate pre-coated with anti-T7 RNA polymerase antibody. Following addition of the sample, kits are incubated with horseradish peroxidase (HRP) labeled antibodies to form antibody-antigen-enzyme-labeled antibody complexes. After washing, TMB substrate solution is added and catalyzed by HRP to produce a blue color product that changes into yellow after adding acidic stop solution. The depth of the color is positively correlated with the T7 RNA polymerase content in the sample. The absorbance (OD value) is measured at 450 nm.

- **This kit is used for the quantitative detection of T7 RNA polymerase content in samples.**
- **Only one washing step is required, with a total incubation time of 75 minutes.**
- **No cross-reactivity to other IVT tool enzymes.**
- **Adaptable to different types of T7 RNA polymerase from various suppliers.**



Specifically recognizes the T7 RNA polymerase with no cross-reactivity to other IVT tool enzymes

Double-stranded RNA (dsRNA) ELISA Kit

Detection limit: < 0.1 ng/mL

Intra-assay CV: < 10%

Quantification limit: 0.25 ng/mL

Recovery rate: 80%-120%

Quantitation Limit					Repeatability and Accuracy				
Sample	OD	Conc. (calculated) (ng/mL)	CV	Recovery rate	Sample	OD	Conc. (calculated) (ng/mL)	CV	Recovery rate
0.25 ng/mL	0.091	0.24	3.2%	96%	24 ng/mL Standard	2.910	26.98	2.1%	112%
	0.094	0.26		104%		2.855	26.23		109%
	0.092	0.25		98%		2.853	26.20		109%
	0.094	0.26		104%		2.877	26.53		111%
	0.091	0.24		96%		2.838	26.00		108%
	0.092	0.25		98%		2.956	27.61		115%
	0.093	0.25		101%		2.822	25.79		107%
	0.094	0.26		104%		2.865	26.37		110%

Adaptable to different T7 RNA polymerase types from different suppliers.

T7 RNA Polymerase Suppliers	Concentration	T7 RNA Polymerase ELISA Kit	
		Conc. (calculated) (ng/ml)	Recovery rate
Creative Diagnostics (M6 mutant)	10 ng/ml	9.94	99%
Creative Diagnostics (M13 mutant)	10 ng/ml	7.33	73%
Creative Diagnostics (WT)	10 ng/ml	12.23	122%
Supplier N	10 ng/ml	8.03	80%
Supplier V	10 ng/ml	11.22	112%
Supplier Y	10 ng/ml	9.26	93%
Supplier T	10 ng/ml	2.80	28%

Sample	Without spike		With spike (4.00 ng/mL)		Recovery rate of Spike sample
	Average OD	Conc.(calculated)	Average OD	Conc.(calculated)	
Inorganic pyrophosphatase	0.036	--	0.949	4.02	101%
RNase inhibitor	0.033	--	0.943	3.99	100%
Vaccinia virus capping enzyme	0.038	--	0.948	4.01	100%
Methyltransferase	0.035	--	1.012	4.32	108%
DNase I	0.034	--	0.951	4.03	101%

Cat. No.	Product Name	Size
DEIANS032	T7 RNA Polymerase ELISA Kit	96T