



mutant T7 RNA Polymerase

Catalog Number: 04-0001

Description	The mutant T7 RNA Polymerase with a mutation from tyrosine to phenylalanine at position 639 of the wild-type T7 RNA Polymerase, is used for in vitro synthesis of defined “transcripts” that are complementary to nucleic acids cloned into a plasmid or other vector downstream from a T7 RNA polymerase promoter. In contrast to the wild-type T7 RNA polymerase, the mutant enzyme can incorporate 2′-deoxyribonucleoside-5′-triphosphates or other 2′-modified triphosphates such as ribonuclease-resistant 2-fluoro-ribonucleoside-5′-triphosphates, in addition to the canonical ribonucleoside-5′-triphosphates. The ability of this mutant enzyme to incorporate various non-canonical 2′-ribonucleotides permits either primed or unprimed in vitro synthesis of “transcripts” composed of rNMPs, dNMPs, modified 2′-NMPs, or of mixed dNMP/rNMP, or 2′-modified-NMP/rNMP composition for a variety of applications.
Source	<i>Escherichia coli</i>
Molecular Weight	Approximately 98.8 kDa, a single non-glycosylated polypeptide chain containing 883 amino acids.
Purity	>90% by SDS-PAGE
Physical Appearance	colorless clear liquid
Formulation	The enzyme is supplied in a 50% glycerol solution containing 50 mM Tris-HCl(pH 8.0), 100 mM NaCl and 1.0 mM DTT.
storage	Store only at –20°C in a freezer without a defrost cycle.
PRICE	RMB 185 /1000U; RMB 850 /5000U
Usage	*This product is for research use only.