

DATA QUALITY SHEET



T7 RNA Polymerase

FOR RESEARCH USE ONLY

Cat. GC-020-0100, GC-020-0250, GC-020-0500, GC-020-1000, GC-020-5000

DESCRIPTION	Isolated from recombinant E. coli strain this DNA-dependent RNA polymerase is strictly for its promoter. It is used to transcribe RNA from DNA templates, cloned into vectors containing T7 promoter.
APPLICATION	<ul style="list-style-type: none">- Radiolabeled RNA probe preparation- RNA generation for in vitro translation- RNA generation for studies of RNA structure, processing and catalysis- Expression control via anti-sense RNA
CONCENTRATION	60 units/ μ l.
UNIT DEFINITION	One unit is the amount of enzyme that incorporates 1 nmol of labelled nucleoside triphosphates into acid-precipitable RNA in 60 minutes at 37°C.
STORAGE BUFFER	20mM Tris-HCl pH 7.5, 100mM NaCl, 0,1mM EDTA, 2mM DTT, 0,1mg/ml BSA, 50% glycerol (v/v)
REACTION BUFFER	Reaction buffer (5x): 200mM Tris-HCl pH 7.9, 30mM MgCl ₂ , 50mM DTT
STORAGE TEMPERATURE	Store T7 RNA polymerase below 0°C, preferably at -20°C, in a constant temperature freezer.
FUNCTIONAL ANALYSIS	Tested functionally in a unit activity test.