

New England Biolabs Product Specification

Product Name:	<i>Terminal Transferase</i>
Catalog #:	<i>M0315S/L</i>
Concentration:	<i>20,000 units/ml</i>
Unit Definition:	<i>One unit is defined as the amount of enzyme catalyzing the incorporation of 1 nmol dTTP into acid-insoluble material in a total reaction volume of 50 µl in 1 hour at 37°C using d(A)18 as primer.</i>
Shelf Life:	<i>24 months</i>
Storage Temp:	<i>-20°C</i>
Storage Conditions:	<i>100 mM NaCl, 50 mM KPO₄, 1.43 mM BME, 50 % Glycerol, 0.1 % Triton®X-100, (pH 7.3 @ 25°C)</i>
Specification Version:	<i>PS-M0315S/L v1.0</i>
Effective Date:	<i>04 May 2018</i>

Assay Name/Specification (minimum release criteria)

Endonuclease Activity (Nicking) - A 50 µl reaction in Terminal Transferase Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 50 units of Terminal Transferase incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.

Exonuclease Activity (Radioactivity Release) - A 50 µl reaction in Terminal Transferase Reaction Buffer containing 1 µg of a mixture of single and double-stranded [³H] *E. coli* DNA and a minimum of 50 units of Terminal Transferase incubated for 4 hours at 37°C releases <0.2% of the total radioactivity.

Protein Purity Assay (SDS-PAGE) - Terminal Transferase is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.

* The BSA in this product has been granted an EDQM "Certificate of Suitability" from the European Directorate for the Quality of Medicines (# R1-CEP-2003-204-Rev00) and has been granted a USDA Certificate for Export of Bovine Blood Plasma/Serum for Manufacture into Pharmaceutical Products.



Date 04 May 2018

Derek Robinson
Director of Quality Control

