

New England Biolabs Certificate of Analysis

Product Name: *Tte-UvrD Helicase*
Catalog Number: *M1202S*
Concentration: *20 µg/ml*
Packaging Lot Number: *10088264*
Expiration Date: *08/2022*
Storage Temperature: *-20°C*
Storage Conditions: *10 mM Tris-HCl , 100 mM KCl , 1 mM DTT , 0.1 mM EDTA , 0.1 % Triton®X-100 , 50 % Glycerol, (pH 7.4 @ 25°C)*
Specification Version: *PS-M1202S v1.0*

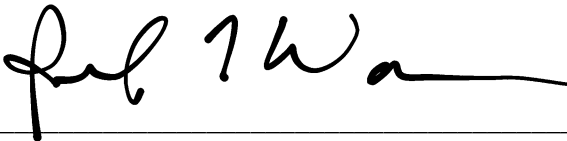
Tte-UvrD Helicase Component List			
NEB Part Number	Component Description	Lot Number	Individual QC Result
P0756SVIAL	Adenosine 5'-Triphosphate (ATP)	10085171	Pass
M1202SVIAL	Tte-UvrD Helicase	10079152	Pass
B0537SVIAL	Isothermal Amplification Buffer	10076261	Pass

Assay Name/Specification	Lot # 10088264
Endonuclease Activity (Nicking) A 50 µl reaction in CutSmart® Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 2 µg of Tte-UvrD Helicase incubated for 4 hours at 37°C results in <10% conversion to the nicked form as determined by agarose gel electrophoresis.	Pass
Exonuclease Activity (Radioactivity Release) A 50 µl reaction in CutSmart® Buffer containing 1 µg of a mixture of single and double-stranded [³ H] E. coli DNA and a minimum of 2 µg of Tte-UvrD Helicase incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	Pass
Functional Testing (ATP-dependent LAMP Inhibition) Tte-UvrD Helicase is tested for ATP-dependent inhibition of a LAMP reaction and suppression of amplification in a no template control reaction.	Pass
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in CutSmart® Buffer containing 1 µg of Lambda-HindIII DNA and a minimum of 2 µg of Tte-UvrD Helicase incubated for 16 hours at 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

Assay Name/Specification	Lot # 10088264
<p>Protein Purity Assay (SDS-PAGE) Tte-UvrD Helicase is $\geq 95\%$ pure as determined by SDS-PAGE analysis using Coomassie Blue detection.</p>	Pass
<p>RNase Activity (Extended Digestion) A 10 μl reaction in NEBuffer 4 containing 40 ng of a 300 base single-stranded RNA and a minimum of 1 μl of Tte-UvrD Helicase is incubated at 37°C. After incubation for 16 hours, $>90\%$ of the substrate RNA remains intact as determined by gel electrophoresis using fluorescent detection.</p>	Pass

This product has been tested and shown to be in compliance with all specifications.

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Jenna Ware
Production Scientist
23 Oct 2020



Josh Hersey
Packaging Quality Control Inspector
23 Oct 2020