

New England Biolabs Certificate of Analysis

Product Name: *SwaI*
Catalog #: *R0604S/L*
Concentration: *10,000 units/ml*
Unit Definition: *One unit is defined as the amount of enzyme required to digest 1 µg of pUPS DNA in 1 hour at 25°C in a total reaction volume of 50 µl.*
Lot #: *0031504*
Assay Date: *04/2015*
Expiration Date: *4/2017*
Storage Temp: *-20°C*
Storage Conditions: *400 mM NaCl, 10 mM Tris-HCl (pH 7.4), 1 mM DTT, 0.1 mM EDTA, 50% Glycerol, 200 µg/ml BSA*
Specification Version: *PS-R0604S/L v1.0*
Effective Date: *08 Jul 2013*

Assay Name/Specification (minimum release criteria)	Lot #0031504
Exonuclease Activity (Radioactivity Release) - A 50 µl reaction in NEBuffer 3.1 containing 1 µg of a mixture of single and double-stranded [³ H] <i>E. coli</i> DNA and a minimum of 100 units of SwaI incubated for 4 hours at 25°C releases <0.1% of the total radioactivity.	Pass
Ligation and Recutting (Terminal Integrity) - After a 20-fold over-digestion of pUPS DNA with SwaI, ~75% of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at 16°C. Of these ligated fragments, ~75% can be recut with SwaI.	Pass
Non-Specific DNase Activity (16 Hour) - A 50 µl reaction in NEBuffer 3.1 containing 1 µg of pUPS DNA and a minimum of 100 Units of SwaI incubated for 16 hours at 25°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass

* 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.



Authorized by
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08 Jul 2013



Inspected by
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13 May 2015

