Biosabos

## New England Biolabs <br> Certificate of Analysis

| Product Name: | SexAI |
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| Catalog \#: | R0605S/L |
| Concentration: | 5,000 units/ml |
| Unit Definition: | One unit is defined as the amount of enzyme required to digest $1 \mu g$ of pBC4 DNA (dcm-) in 1 bour at $37^{\circ} \mathrm{C}$ in a total reaction volume of $50 \mu \mathrm{l}$. |
| Lot \#: | 0151504 |
| Assay Date: | 04/2015 |
| Expiration Date: | 04/2017 |
| Storage Temp: | $-20^{\circ} \mathrm{C}$ |
| Storage Conditions: | $50 \mathrm{mM} \mathrm{KCl}, 10 \mathrm{mM} \mathrm{Tris-HCl} \mathrm{(pH} \mathrm{7.4)} ,1 \mathrm{mM} \mathrm{DTT} ,0.1 \mathrm{mM} \mathrm{EDTA} ,\mathrm{50} \mathrm{\%} \mathrm{Glycerol} ,200 \mu \mathrm{~g} / \mathrm{ml} \mathrm{BSA}$ |
| Specification Version: | PS-R0605S/L v1.0 |
| Effective Date: | 18 Dec 2014 |


| Assay Name/Specification (minimum release criteria) | Lot \#0151504 |
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| Exonuclease Activity (Radioactivity Release) - A $50 \mu 1$ reaction in CutSmart ${ }^{\mathrm{TM}}$ Buffer containing $1 \mu \mathrm{~g}$ of a mixture of single and double-stranded [ $\left.{ }^{3} \mathrm{H}\right]$ E. coli DNA and a minimum of 15 units of SexAI incubated for 4 hours at $37^{\circ} \mathrm{C}$ releases $<0.1 \%$ of the total radioactivity. <br> Ligation and Recutting (Terminal Integrity) - After a 10 -fold over-digestion of pBC 4 dcm - DNA with SexAI, $\sim 75 \%$ of the DNA fragments can be ligated with T4 DNA ligase in 16 hours at $16^{\circ} \mathrm{C}$. Of these ligated fragments, $\sim 75 \%$ can be recut with SexAI. <br> Non-Specific DNase Activity ( $\mathbf{1 6}$ Hour) - A $50 \mu 1$ reaction in CutSmart ${ }^{\mathrm{TM}}$ Buffer containing $1 \mu \mathrm{~g}$ of pBC 4 dcm- DNA and a minimum of 15 Units of SexAI incubated for 16 hours at $37^{\circ} \mathrm{C}$ results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis. | Pass <br> Pass <br> Pass |

* The BSA in this product bas 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
Derek Robinson
18 Dec 2014


