

New England Biolabs Product Specification

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| <i>Product Name:</i> | <i>Glycogen Synthase Kinase 3 (GSK-3)</i> |
| <i>Catalog #:</i> | <i>P6040S/L</i> |
| <i>Concentration:</i> | <i>500,000 units/ml</i> |
| <i>Unit Definition:</i> | <i>One unit is defined as the amount of GSK-3 required to catalyze the transfer of 1 pmol of phosphate to CREB Phosphopeptide, KRREILSRRPpSYR (400 μM), in 1 minute at 30°C in a total reaction volume of 25 μl.</i> |
| <i>Shelf Life:</i> | <i>12 months</i> |
| <i>Storage Temp:</i> | <i>-20°C</i> |
| <i>Storage Conditions:</i> | <i>50 mM NaCl, 20 mM Tris-HCl, 5 mM DTT, 1 mM EDTA, 50 % Glycerol, 0.03 % Brij® 35, (pH 7.5 @ 25°C)</i> |
| <i>Specification Version:</i> | <i>PS-P6040S/L v1.0</i> |
| <i>Effective Date:</i> | <i>11 Nov 2015</i> |

Assay Name/Specification (minimum release criteria)

Phosphatase Activity (pNPP) - A 220 μl reaction in NEBuffer for Protein Kinases containing 50 mM *p*-Nitrophenyl Phosphate (pNPP) and a minimum of 1,000 units Glycogen Synthase Kinase 3 (GSK-3) incubated for 2 hours at 30°C yields no detectable phosphatase activity as determined by spectrophotometric analysis.

Protease Activity (SDS-PAGE) - A 20 μl reaction in 1X NEBuffer for Protein Kinases containing 24 μg of a standard mixture of proteins and a minimum of 1,000 units of Glycogen Synthase Kinase 3 (GSK-3) incubated for 2 hours at 30°C, results in no detectable degradation of the protein mixture as determined by SDS-PAGE with Coomassie Blue detection.



Date 11 Nov 2015

Derek Robinson
Director of Quality Control

