NEW ENGLAND BioLabs Inc.
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240 County Road
Ipswich, MA 01938-2723
Tel 978-927-5054
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New England Biolabs
Certificate of Analysis

Product Name:	*Human Alkyladenine Glycosylase (hAAG)*
Catalog Number:	*M0313S*
Concentration:	*10,000 U/ml*
Unit Definition:	*One unit is defined as the amount of enzyme required to create an AP site from 1 pmol of a 34-mer oligonucleotide duplex containing a single deoxyinosine site in a total reaction volume of 10 µl in 1 hour at 37°C.*
Packaging Lot Number:	*10211742*
Expiration Date:	*11/2025*
Storage Temperature:	*-20°C*
Storage Conditions:	*10 mM Tris-HCl , 100 mM KCl , 1 mM DTT , 0.1 mM EDTA , 0.5 % Tween® 20 , 0.5 % IGEPAL® CA-630 , 50 % Glycerol, (pH 7.4 @ 25°C)*
Specification Version:	*PS-M0313S/L v1.0*

Human Alkyladenine Glycosylase (hAAG) Component List			
NEB Part Number	**Component Description**	**Lot Number**	**Individual QC Result**
M0313SVIAL	Human Alkyladenine Glycosylase (hAAG)	10216721	**Pass**
B9004SVIAL	ThermoPol® Reaction Buffer Pack	10201526	**Pass**

Assay Name/Specification	**Lot # 10211742**
Endonuclease Activity (Nicking) A 50 µl reaction in ThermoPol® Reaction Buffer containing 1 µg of supercoiled PhiX174 DNA and a minimum of 100 units of hAAG 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 NEBuffer 1 containing 1 µg of a mixture of single and double-stranded [^{3}H] E. coli DNA and a minimum of 50 units of hAAG incubated for 4 hours at 37°C releases <0.1% of the total radioactivity.	**Pass**
Non-Specific DNase Activity (16 Hour) A 50 µl reaction in ThermoPol® Reaction Buffer containing 1 µg of Lambda-HindIII DNA and a minimum of 100 units of hAAG incubated for 16 hours at 37ºC results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	**Pass**
Protein Purity Assay (SDS-PAGE)	**Pass**

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Assay Name/Specification	Lot # 10211742
hAAG is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	

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

One or more products referenced in this document may be covered by a 3rd-party trademark. Please visit www.neb.com/trademarks for additional information.

Jamie Souza
Production Scientist
15 Nov 2023

Michael Tonello
Packaging Quality Control Inspector
28 Nov 2023