

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: 10082620
Expiration Date: 09/2022
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)	10082619	Pass
B9004SVIAL	ThermoPol® Reaction Buffer Pack	10067018	Pass

Assay Name/Specification	Lot # 10082620
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 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
Protein Purity Assay (SDS-PAGE) hAAG is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection.	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
Endonuclease Activity (Nicking) A 50 µl reaction in ThermoPol® Reaction Buffer containing 1 µg of supercoiled	Pass

Assay Name/Specification	Lot # 10082620
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.	

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.



Lauren Higgins
Production Scientist
18 Sep 2020



Michael Tonello
Packaging Quality Control Inspector
18 Sep 2020