

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.
Lot Number: 10054972
Expiration Date: 09/2021
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)	10054973	Pass
B9004SVIAL	ThermoPol® Reaction Buffer Pack	10041932	Pass

Assay Name/Specification	Lot # 10054972
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 37°C results in a DNA pattern free of detectable nuclease degradation as determined by agarose gel electrophoresis.	Pass
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
Protein Purity Assay (SDS-PAGE)	Pass

Assay Name/Specification	Lot # 10054972
hAAG is $\geq 95\%$ 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.



Doreen Duquette
Production Scientist
18 Apr 2019



Michael Tonello
Packaging Quality Control Inspector
25 Sep 2019