

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: 10116413
Expiration Date: 07/2023
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) | 10116412 | Pass |
| B9004SVIAL | ThermoPol® Reaction Buffer Pack | 10113098 | Pass |

| Assay Name/Specification | Lot # 10116413 |
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| 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) hAAG is ≥ 95% pure as determined by SDS-PAGE analysis using Coomassie Blue detection. | 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 |
| Exonuclease Activity (Radioactivity Release) A 50 µl reaction in NEBuffer 1 containing 1 µg of a mixture of single and | Pass |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| 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. | |

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

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Lauren Higgins
Production Scientist
17 Aug 2021



Michael Tonello
Packaging Quality Control Inspector
17 Aug 2021