eurofins | Food Integrity & Innovation

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|---|---|
| **Report Number:** | **4797951-0** |
| **Report Date:** | **05-Feb-2025** |
| **Report Status:** | **Final** |

# Certificate of Analysis

| **Sample Name:** | **New Sample 1** | **Eurofins Sample:** | **14890345** |
|---|---|---|---|
| **Project ID** | 20250115-0002 | **Receipt Date** | 21-Jan-2025 |
| **PO Number** | n/a | **Receipt Condition** | Ambient temperature |
| **Lot Number** | 0224135 | **Login Date** | 15-Jan-2025 |
| **Sample Serving Size** | 7 mg | **Date Started** | 27-Jan-2025 |
| **Description** | BLUE RENEW CAPSULES | **Sampled** | Sample results apply as received |
| | | **Online Order** | 901-2025-E003441 |

| Analysis | Result |
|---|---|
| **Amino Acids** | |
| Hydroxyproline | 0.336 mg/Serving Size |
| Collagen (Calculated from hydroxyproline using a conversion factor of 8) | 2.69 mg/Serving Size |
| **Free amino acids** | |
| Glycine | 1.03 mg/Serving Size |
| **N-Acetyl-L-Cysteine *** | |
| N-Acetyl-L-Cysteine | 1.14 mg/Serving Size |
| **Creatine *** | |
| Creatine Monohydrate | 0.00110 g/Serving Size |
| Creatinine | <0.000035 g/Serving Size |
| **Aerobic Plate Count *** | |
| Aerobic Plate Count | <100 CFU/g |
| **E. coli *** | |
| Escherichia Coli | Absent /10 g |
| **Enterobacteriaceae (Bile-Tolerant Gram-Negative Bacteria) *** | |
| Enterobacterial Count | <10 MPN MPN/g |
| **Salmonella USP *** | |
| Salmonella | Absent /10 g |
| **Staphylococcus *** | |
| Staphylococcus Aureus | Absent /10 g |
| **Yeast and Mold Count *** | |
| Combined Yeast and Mold Count | <100 CFU/g |
| **Preparatory Testing of Nutritional and Dietary Supplements *** | |
| Staphylococcus Suitability Result | PASS |
| Bile-Tolerant Gram-Neg Bacteria Suitability Result | PASS |
| Aerobic Plate Suitability Result | PASS |
| Total Combined Yeast-Molds Count | PASS |
| Salmonella Suitability Result | PASS |
| E. coli Suitability Result | PASS |
| **Elements by ICP Mass Spectrometry** | |
| Mercury | <5.00 ppb |

*** This analysis or component is not ISO accredited.**

# Certificate of Analysis

| Sample Name: | New Sample 1 | Eurofins Sample: | 14890345 |
|---|---|---|---|
| **Project ID** | 20250115-0002 | **Receipt Date** | 21-Jan-2025 |
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| **Description** | BLUE RENEW CAPSULES | **Sampled** | Sample results apply as received |
| | | **Online Order** | 901-2025-E003441 |

| Analysis | Result |
|---|---|
| **Elements by ICP Mass Spectrometry** | |
| Lead | 10.4 ppb |
| Cadmium | 5.45 ppb |
| Arsenic | 133 ppb |

| Method References | Testing Location |
|---|---|

**Aerobic Plate Count (USPC2021)**

**Eurofins Micro Lab - Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

USP Current revision, Chapter 2021.
To satisfy the requirements of the USP, the Preparatory Test must be completed on each matrix.
**Based on the results of the preparatory test, the detection limit stipulated is adequate for the enumeration of the specified microorganisms.

**Amino Acids (TAALC_S)**

**Food Integrity Innovation-Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

R. Schuster, "Determination of Amino Acids in Biological, Pharmaceutical, Plant and Food Samples by Automated Precolumn Derivatization and HPLC", Journal of Chromatography, 1988, 431, 271-284.

Henderson, J.W., Ricker, R.D. Bidlingmeyer, B.A., Woodward, C., "Rapid, Accurate, Sensitive, and Reproducible HPLC Analysis of Amino Acids, Amino Acid Analysis Using Zorbax Eclipse-AAA columns and the Agilent 1100 HPLC," Agilent Publication, 2000. Barkholt and Jensen, "Amino Acid Analysis: Determination of Cysteine plus Half-Cystine in Proteins after Hydrochloric Acid Hydrolysis with a Disulfide Compound as Additive", Analytical Biochemistry, 177, 318-322 (1989).

Henderson, J.W., Brooks, A., "Improved Amino Acid Methods using Agilent Zorbax Eclipse Plus C18 Columns for a Variety of Agilent LC Instrumentation and Separation Goals," Agilent Application Note 5990-4547 (2010).

*** This analysis or component is not ISO accredited.**

# Certificate of Analysis

| Method References | Testing Location |
|---|---|

**Creatine (CREA_S)**

**Food Integrity Innovation-Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

Creatine and Creatinine by high performance liquid chromatography (HPLC) with UV detection. Analytical Biochemistry 214, pp. 278-283 (1993)

**E. coli (USPE2022)**

**Eurofins Micro Lab - Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

USP Current revision, Chapter 2022.
To satisfy the requirements of the USP, the Preparatory Test must be completed on each matrix.
**Based on the results of the preparatory test, conditions stipulated are adequate for detecting the presence of the specified microorganism.

**Elements by ICP Mass Spectrometry (ICP_MS_S)**

**Food Integrity Innovation-Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

Official Methods of Analysis, Methods 2011.19 and 993.14, and 2015.01, AOAC INTERNATIONAL, (Modified).

**Enterobacteriaceae (Bile-Tolerant Gram-Negative Bacteria) (USPN2021)**

**Eurofins Micro Lab - Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

USP Current revision, Chapter 2021.
To satisfy the requirements of the USP, the Preparatory Test must be completed on each matrix.
**Based on the results of the preparatory test, the detection limit stipulated is adequate for the enumeration of the specified microorganisms.

**Free amino acids (FAALC_S)**

**Food Integrity Innovation-Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

R. Schuster, "Determination of Amino Acids in Biological, Pharmaceutical, Plant and Food Samples by Automated Precolumn Derivatization and HPLC", *Journal of Chromatography*, 431:271-284 (1988).
Henderson, J.W., Ricker, R.D. Bidlingmeyer, B.A., Woodward, C., "Rapid, Accurate, Sensitive, and Reproducible HPLC Analysis of Amino Acids, Amino Acid Analysis Using Zorbax Eclipse-AAA columns and the Agilent 1100 HPLC," Agilent Publication, 2000.

*** This analysis or component is not ISO accredited.**

# Certificate of Analysis

| Method References | Testing Location |
|---|---|

**N-Acetyl-L-Cysteine (NAC_S)**

**Food Integrity Innovation-Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

United States Pharmacopeia, Thirty-Second Revision, page 1423, United States Pharmacopeial Convention, Inc.: Rockville, Maryland (2009). (Modified)

**Preparatory Testing of Nutritional and Dietary Supplements (USPA_PT)**

**Eurofins Micro Lab - Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

**Preparatory Testing of Nutritional and Dietary Supplements (USPC_PT)**

**Eurofins Micro Lab - Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

**Preparatory Testing of Nutritional and Dietary Supplements (USPE_PT)**

**Eurofins Micro Lab - Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

**Preparatory Testing of Nutritional and Dietary Supplements (USPM_PT)**

**Eurofins Micro Lab - Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

**Preparatory Testing of Nutritional and Dietary Supplements (USPN_PT)**

**Eurofins Micro Lab - Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

**Preparatory Testing of Nutritional and Dietary Supplements (USPS_PT)**

**Eurofins Micro Lab - Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

**Salmonella USP (USPS2022)**

**Eurofins Micro Lab - Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

USP Current revision, Chapter 2022.
To satisfy the requirements of the USP, the Preparatory Test must be completed on each matrix.
**Based on the results of the preparatory test, conditions stipulated are adequate for detecting the presence of the specified microorganism.

**Staphylococcus (USPA2022)**

**Eurofins Micro Lab - Madison**
6304 Ronald Reagan Ave Madison, WI 53704 USA

USP Current revision, Chapter 2022.
To satisfy the requirements of the USP, the Preparatory Test must be completed on each matrix.
**Based on the results of the preparatory test, conditions stipulated are adequate for detecting the presence of the specified microorganism.

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# Certificate of Analysis

| Method References | Testing Location |
|---|---|
| **Yeast and Mold Count (USPM2021)** | **Eurofins Micro Lab - Madison**<br>6304 Ronald Reagan Ave Madison, WI 53704 USA |

USP Current revision, Chapter 2021.
To satisfy the requirements of the USP, the Preparatory Test must be completed on each matrix.
**Based on the results of the preparatory test, the detection limit stipulated is adequate for the enumeration of the specified microorganisms.

| Testing Location(s) | Released on Behalf of Eurofins by |
|---|---|
| **Food Integrity Innovation-Madison**<br><br>Eurofins Food Chemistry Testing Madison, Inc.<br>6304 Ronald Reagan Ave<br>Madison WI 53704<br>800-675-8375 | **Edward Ladwig - President Eurofins Food Chemistry Testing Madison**<br><br>ilac-MRA A2LA ACCREDITED<br>2918.01 |

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*** This analysis or component is not ISO accredited.**