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## Certificate of Analysis

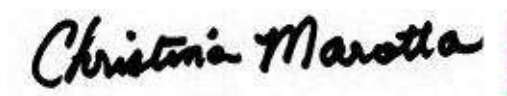
**Product Description:** Donor Horse Serum  
**Catalog Number:** 2921149; 2921154; 29211Z0  
**Lot:** M3658**Formula:** N/A  
**CAS #:** N/A  
**Physical Description:** Golden Brown Solution**Formula Weight:** N/A  
**Storage:** -20°C

| Test               | Specification        | Result       |
|--------------------|----------------------|--------------|
| pH                 | 7.1 - 8.0            | 7.7          |
| Osmolality         | 273 - 301 mOsm/kg    | 293 mOsm/kg  |
| Protein            | 5.6 - 9.1 g/dl       | 7.0 gm/dl    |
| Hemoglobin         | ≤35 mg/dl            | 2 mg/dl      |
| Endotoxin          | For Information Only | 1.0 EU/ml    |
| Mycoplasma         | Absent               | Negative     |
| Bacteria and Fungi | Absent               | Absent       |
| BVD                | Not Detected         | Not Detected |
| Growth Promotion   | Passes               | Passes       |
| Expiration Date    | Month/Day/Year       | 5/31/2013    |

|                      |            |
|----------------------|------------|
| Glucose              | 65 mg/dl   |
| Sodium               | 137 meq/l  |
| Potassium            | 4.1 meq/l  |
| Chloride             | 100 meq/l  |
| B.U.N.               | 19 mg/dl   |
| Creatinine           | 0.9 mg/dl  |
| Uric Acid            | 0.5 mg/dl  |
| Calcium              | 11.4 mg/dl |
| Phosphorus           | 3.8 mg/dl  |
| Albumin              | 3.4 gm/dl  |
| Total Bilirubin      | 0.1 mg/dl  |
| ALT (SGPT)           | 6 IU/l     |
| Alkaline phosphatase | 82 IU/l    |
| AST (SGOT)           | 152 IU/l   |
| LDH                  | 299 IU/l   |

|               |          |
|---------------|----------|
| Cholesterol   | 82 mg/dl |
| Triglycerides | 26 mg/dl |

GGT: 20 IU/l  
Filtration: 0.2 micron cartridge  
Sterile

A handwritten signature in black ink that reads "Christina Marotta". The signature is written in a cursive style and is positioned above a horizontal line.

03/13/2012 - Christina Marotta  
MP Biomedicals, LLC.  
Technical Director

This is an electronically generated document  
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