

## Certificate of Analysis

**PRODUCT:** Bovine Gamma Globulin**CODE NO:** 27005**LOT NO:** 22138**DATE OF  
MANUFACTURE:** August 8, 2016**STORAGE:** 2-8 °C**ORIGIN:** U.S.A.**EU 142/2011:** AR TEC 0007**RECONSTITUTION:** Reconstitute in at least 0.2% NaCl solution.**EU REQUIREMENTS:** Product meets European Union requirements for treated technical blood products:  
pH is lowered to  $\leq 5$  for a minimum of 2 hours.**HEALTHY ANIMAL  
STATEMENT:** This product is made from raw materials that were collected from animals found  
free from obvious signs of infectious and contagious disease.**PROCEDURE:** Bovine gamma globulin is purified from normal bovine serum or plasma collected  
in a USDA certified facility within the contiguous 48 states of the United States  
(documentation is on file). The processing of serum/plasma into gamma globulin  
was achieved exclusively at Pel-Freez Biologicals facilities using a combination of  
existing methods developed in our laboratory.**ASSAYS:**

| Required Assays                                               | Specification        | Result |
|---------------------------------------------------------------|----------------------|--------|
| Serum Protein<br>Electrophoresis                              | $\geq 98\%$          | 99%    |
| Protein by Weight,<br>O.D. 280 nm $E^{1\%}_{1\text{cm}}$ 1.39 | $\geq 85\%$          | 90%    |
| Moisture Content                                              | For information only | 2.62%  |

**QUALITY ASSURANCE**

Quality Control Release Date: February 16, 2017

Sarah Graves  
Quality Systems Technician**Meets or exceeds specifications** ☒**Does not meet specifications** ☐**SUITABLE FOR FURTHER MANUFACTURE OR RESEARCH PURPOSES**