

**United States Department of Agriculture  
Animal and Plant Health Inspection Service  
Center for Veterinary Biologics  
P. O. Box 844  
Ames, IA 50010**

- 1. Reagent Name:** Secondary Reference Serum-Bovine IgG; Stock for Bovine IgG Species Standard
- 2. Strain or Source:** Defibrinated bovine plasma
- 3. Lot Number:** 10848
- 4. Fill Date:** March 13, 2003
- 5. Expiration Date:** April 30, 2025

**Precautions: This material has Sodium Azide at a final concentration of 0.1% w/v. Skin exposure should be treated by washing with soap and water. Eye exposure should be treated by flushing with a running stream of water under low pressure for at least twenty minutes. Cases of ingestion or injection need immediate consultation with a health care professional. Disposal should be conducted in consultation with the institutional safety committee.**

**6. Intended Use:** This serum based secondary reference is for use in assays designed to detect and quantify bovine IgG. Detection methods are limited to those relying on specific reagents such as antibodies directed against bovine IgG since other bovine serum proteins including immunoglobulins are present in this preparation. This is a concentrate and must be diluted as indicated in "Instructions for Use" for preparation of the Bovine IgG Species Standard.

**7. Instructions for Use:** Frozen Lot 10848 contains 31.17 mg/mL  $\pm$  5% mg/mL (3117 mg/dL or 3117 mg%) Bovine IgG. Dilute 1 part Lot 10848 with 2 parts buffer prior to use when testing according to 9 CFR 113.499(a).6. The recommended dilution buffer is 0.05 M Sodium Phosphate containing 0.15 M NaCl at pH 7.2.

The diluted preparation is the Bovine IgG Species Standard described in 9 CFR 113.499(a).6. The concentration of the diluted preparation is nominally at 1000 mg/dL, which is accepted as the serum level of IgG consistent with passive protection in calves and is within the margin of error for the assay.

**8. Test of Reagent:** This reagent is positive for bovine IgG and contains 31.17mg/mL (3117 mg/dL or 3117 mg%).

**9. Container Size, Type, Weight, or Volume:** 2.0-mL cryogenic vials; 1.0 mL/vial.

**10. Storage Conditions:** Dispense the contents of each vial into aliquots of approximately 200 µL upon receipt. Then freeze the aliquots at -20°C or colder in a sealed container. This precaution prevents denaturing from repeated freezing and thawing and conserves the reference supply.

**11. CVB Technical Contact:** Bacteriology Section, Center for Veterinary Biologics, (515) 337-6100.

**12. Origin and Passage History:** The bulk was acquired by the CVB from Midland BioProducts in 2003 and is monitored by the CVB throughout dating.

**13. Method of Preparation:** Pooled bovine plasma from healthy animals was defibrinated, delipidated, dialyzed, concentrated, and filtered. Buffer pH 7.4 contains Tris, NaCl, EDTA, PMSF.

**14. Other:** None.

Reagent orders and feedback should be sent *including phone number* to the following email address: [VS.DB.CVB.Reagent.Requests@usda.gov](mailto:VS.DB.CVB.Reagent.Requests@usda.gov)

Reagent orders forms (APHIS Form 2018) can be found on the CVB website.