

**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:** *Pasteurella multocida* Challenge Culture (bovine)
2. **Strain or Source:** P-1062
3. **Lot Number:** IRP 690
4. **Fill Date:** March 7, 2022
5. **Expiration Date:** October 31, 2027

Precautions: This is an opportunistic pathogen with low risk of infection to humans. However, it is suggested that this reagent be handled in a Class II biological safety cabinet while wearing gloves.

6. **Intended Use:** *P. multocida* challenge material for potency testing of bacterins of bovine origin according to 9 CFR 113.121 using SAM 634.
7. **Instructions for Use:** Reconstitute 1 vial with 1 mL of tryptose broth. Inoculate bovine blood agar plates with a loopful of the reconstituted culture and incubate 35°- 37°C for 16-18 hours. Harvest colonies from plates with pure growth, suspend in tryptose broth, and adjust density to 76-80% transmittance at 630 nm using a Spectronic 20D+ spectrophotometer or equivalent. The recommended mouse challenge dose is 0.2 mL of a 10⁻⁵ dilution of the standardized culture, administered intraperitoneally.
8. **Test of Reagent:** Purity testing was satisfactory according to 9 CFR 113.27b. Colony characteristics, MALDI-TOF analysis, and whole genome sequencing results were consistent with an identity of *P. multocida*. DNA sequence-based serotyping was consistent with *P. multocida* capsular type A and LPS group 3. When following the procedures described in 9 CFR 113.121, the challenge preparation was found to contain approximately 10^{2.85} mouse lethal dose fifty (LD50) per 0.2 mL.
9. **Container Size, Type, Weight, or Volume:** 1.0 mL of lyophilized culture in 2-mL serum vials.
10. **Storage Conditions:** 7°C or less

11. **CVB Technical Contact:** Bacteriology Section, Center for Veterinary Biologics, (515) 337-6100 or FAX (515) 337-7673.
12. **Origin and Passage History:** Bovine liver isolate, passaged at the CVB.
13. **Method of Preparation:** Cultures were grown on dextrose starch agar. Bacterial growth was harvested in double-strength skim milk, dispensed into 1.0-mL aliquots, and lyophilized.
14. **Other:** None.

Restrictions: For potency testing of *Pasteurella multocida* bacterins of bovine origin according to 9 CFR 113.121.

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

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