Document Title: Evaluation of Percipitating Animal Antisera QC
Controlled: Yes, with red stamp present
Controlled By: Quality Manager

Prepared By: _____ Date: _____

Approved By: _____ Date: _____

A. PURPOSE:

To determine if the animal antiserum cross-reacts with other species.

B. RESPONSIBILITY:

Forensic Science Examiners 1 and 2 in the Forensic Biology Section. Ordering information and quality control are maintained in a log book in the Forensic Biology Section.

C. SAFETY:

Use appropriate measures for the proper handling of the Ouchterlony plates according to SOP-GL-2 (Safety Manual) and the Material Safety Data Sheets.

D. DEFINITIONS:

PBS: Phosphate Buffered Saline

E. PROCEDURE:

1. Materials:
   a. Ouchterlony plates
   b. Animal antisera (anti-dog, -cat, -deer, etc.)
   c. Known bloodstain extracts or thawed sera controls
   e. PBS
   f. 0.05% ammonia
   g. Distilled water (dH_2O)
   h. Disposable pipets or micropipet and tips
   i. Microcentrifuge tubes

2. Procedures:

   a. If the antiserum to be tested is lyophilized, reconstitute according to manufacturer's specifications.

   b. Prepare the following samples for the detection of cross reactivity with animal antisera according to SOP-FB-09 (Species Double Diffusion Test):
      Human bloodstain extract
      Corresponding animal control bloodstain and/or thawed serum
      All available animal bloodstain extracts and thawed sera

E. 2. c. Test the antisera according to SOP-FB-09 (Species Double Diffusion Test). Record the results and other appropriate information on the Ouchterlony Quality Record Worksheet (FBQR-08), see examples of sample placement on page 4, below.

3. Evaluation:

a. An antiserum that yields a positive result with a sample other than its corresponding control, exhibits cross reactivity. If this occurs, consideration will be taken to determine if the antiserum is suitable for use.

b. If the appropriate results are not obtained and the antiserum is determined to be unsuitable for use, review the procedure and replace the antiserum as needed.

4. If the antiserum is determined to be suitable for use, store as follows:

a. Antiserum received in a lyophilized state:

aa. Aliquot 50µl volumes of the reconstituted antiserum into microcentrifuge tubes labeled with the antiserum type and lot #. Store in the freezer in a zip lock bag labeled with the antiserum, lot #, date received, date reconstituted and examiner's initials.

bb. Store additional bottles with lyophilized antiserum in the freezer. Label each bottle with the date received and examiner's initials. Re-titrate lyophilized antiserum after thawing and reconstituting as above.

b. Antiserum received in a liquid state:

Aliquot 50µl volumes into microcentrifuge tubes labeled with the antiserum type. Store in the freezer in a zip lock bag labeled with the antiserum, lot #, date received and examiner's initials.

c. Thawed antiserum may be stored in the refrigerator until consumed. Discard if a decrease in activity or bacterial growth is observed.

d. Avoid repeated freezing and thawing of the antiserum.

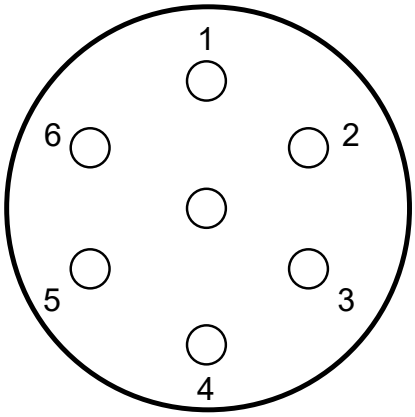
F. REFERENCES:

1. SOP-GL-2 (Safety Manual).
2. Material Safety Data Sheets.

OUCHTERLONY WORKSHEET

I.

C
1
2
3
4
5
6



Examiner

Date:

αSerum

Lot #:

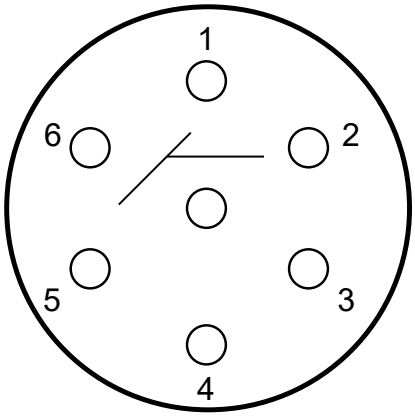
Titer:

Ouchterlony

Date:

II.

C - anti-Dog
1 -dog serum #55983
2 -cat
3 -chicken
4 -cow
5 -deer
6 -1:10 human blood



Examiner: KJL

Date: 11/15/99

αSerum

Lot #: 02727

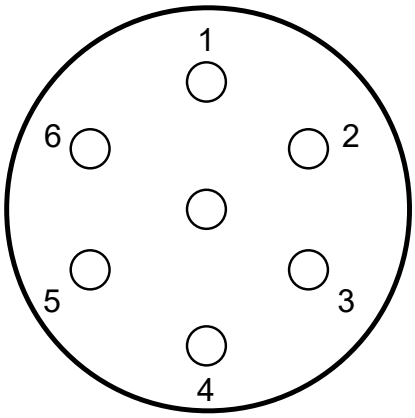
Titer: N/A

Ouchterlony

Date: 11/01/99

III.

C
1
2
3
4
5
6



Examiner:

Date:

αSerum

Lot #:

Titer:

Ouchterlony

Date: