Title: Takayama Reagent QC

A. PURPOSE:

To prepare the reagent for the confirmatory crystal test for blood and to perform quality control on the prepared reagent.

B. RESPONSIBILITY:

Forensic Science Examiner 1 and 2 in the Forensic Biology Section. Ordering information is maintained in a log book in the Forensic Biology Section.

C. SAFETY:

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

D. PROCEDURE:

1. 10 % Sodium Hydroxide Solution
   a. Materials:
      aa. Sodium Hydroxide
      bb. Distilled water (dH_2O)

   b. Procedure:
      aa. Make a 10% weight/volume solution with dH_2O.

      bb. Mix together until dissolved.

      cc. Discard excess sodium hydroxide solution after preparing Takayama reagent.

2. Glucose solution
   a. Materials:
      aa. Glucose 5g
      bb. Distilled water 5ml

   b. Procedure:
      aa. Mix together and heat until dissolved.

      bb. Discard excess glucose solution after preparing Takayama reagent.

D.3. Takayama Reagent

a. Materials:

aa.	10% Sodium hydroxide solution	5ml
bb.	Pyridine	5ml
cc.	Glucose solution	5ml
dd.	Distilled water	10ml

b. Procedure:

aa. Mix all materials together and place in a brown dropper bottle.

bb. Test each new batch of reagent before use according to SOP-FB-08 (Confirmatory Test for Blood) and the Takayama Reagent Log Sheet. Record the required information.

cc. If the appropriate results are not obtained, discard the reagent, review the procedure and make new reagent.

dd. If the reagent is suitable for use, record the reagent, lot # (date of preparation), control date and examiner's initials on the bottle and store in the refrigerator.

ee. Discard after one (1) year.

E. REFERENCES:

1. Takayama, M. " A Method for Identifying Blood by Hemachromogen Crystalization" Kokka Igakkai Zasshi 306 : 15-33 (issue); 463-481 (cumulative),(1912) 15.

2. Metropolitan Police Forensic Science Laboratory. Biology Methods Manual. 1978, pp. 2-90 to 2-91.

3. SOP-GL-2 (Safety Manual).

4. Material Safety Data Sheets.