Qiagen Casework GO! Y Screen of Sexual Assault Stains or Swabs

Approximately 1/4 of a swab or a 3x3mm cutting of a stain should be used. The Qiagen Casework GO! method should only be used for cases involving a male assailant on a female victim. Do not use for male on male cases, female on female cases, nor female assailant on male victim cases.

1 Procedure

1.1 Retrieve the following reagents and scan the lot numbers

Allow reagents to thaw before use:

Casework GO! Lysis Buffer
Proteinase K
1M DTT aliquot
Ultrapure water, 15mL

1.2 Turn on heating instruments. Set instruments with shaking to 60°C and instruments without shaking to 90°C.

1.2.1 More than one heating instrument per temperature may be used depending on the number of samples.

1.3 Retrieve sample cuttings in 1.5mL screw cap tubes. Compare the LIMS label on the tubes to the sample list in LIMS and confirm that you have the correct samples. The maximum number of samples per batch is 48 (47 samples + 1 extraction negative).

1.4 Scan each sample into your custody.

1.5 Obtain one 1.5mL screw cap tube for your extraction negative.

1.6 Print your **LIMS** labels and label your samples and extraction negative.

1.7 Dilute 1M DTT. **NOTE**: 1M DTT aliquot must **NOT** be re-frozen. After thawing, if the 1M DTT aliquot appears cloudy, do not use it. Notify the Laboratory Manager and QA Team for further instructions and thaw a new tube of 1M DTT for use in the extraction.

1.7.1 Pipette 5µL from the 1M DTT aliquot into a new 1.5 mL tube.

1.7.2 Add 495µL of Ultrapure Water to 5µL of DTT. Vortex thoroughly.

1.8 The Mixture Information table contains the reagent amounts for the master mix. Click **Recalculate** if you updated the number of samples on the worksheet and need to recalculate the amount. Use the volumes listed in the "Total Quantity" column to prepare the master mix.

Manual calculation: n samples + one extraction negative x 1.1 using the following ratio.

Reagent	Per reaction
Casework GO! Lysis Buffer	187 µL
Proteinase K	7 µL
DTT, diluted 1:100	6 µL
Total volume	**200 µL**

1.9 Vortex prepared master mix thoroughly.

1.10 Have a **witness** confirm the LIMS labels for each sample.

1.11 Add 200 µL of master mix to each sample tube including the extraction negative.

1.12 Incubate the sample tubes at 60°C for 25 minutes with shaking at 900 rpm. Record the incubation temperature and the instrument in the 'Additional Information' section and the 'Instrument' box at the top of the worksheet.

1.12.1 Record each heating instrument separately in LIMS, if more than one instrument is used.

1.13 Remove the sample tubes from the thermomixer, transfer to the thermomixer set to 90°C, and incubate the samples for 5 minutes without shaking. Record the incubation temperature and the instrument in the 'Additional Information' section and the 'Instrument' box at the top of the worksheet.

1.13.1 Record each heating instrument separately in LIMS, if more than one instrument is used.

1.14 Fill out the 'Extracted Run By' and 'Response' dropdown.

1.15 Create the QUANTTRIO submission for the samples.

1.16 Verify the samples listed on the Trio Submission Worksheet click [Save] and close the Submission worksheet.

1.17 Store the extracts at 4°C and record transfer in LIMS.