Intermountain Forensics	SOP #	SER-200
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Forensic DNA Technical Leader Approval	**Issue Date**	
	5/21/20	

Substrate Removal and Supernatant Collection

1. Purpose

This procedure is used to remove cells from a substrate in preparation for multiple tube combinations and supernatant collection for blood, saliva, or semen testing, when applicable.

2. Summary

TE Buffer is added to samples in need of multiple tube combinations and/or supernatant collection. Samples are shaken in a thermomixer without heat to remove cells and rehydrate body fluids, if present. Samples are centrifuged to pellet any cells present, supernatant is removed for testing, cell pellets are dislodged through vortexing, and are then combined, if necessary, for multiple substrate tube items and proceed to extraction.

3. Procedure

Define the procedures in bulleted format.

Combination/Supernatant Collection Procedure:

1. Add 250 µL of TE buffer to the spin basket.
2. Agitate for 15 minutes in a thermomixer at 600rpm with no additional heat.
3. Centrifuge for 5 minutes at max speed to allow the solution to pass through the basket and pellet the cells.
4. Remove the top 200 µL of supernatant and transfer to the supernatant tube.
5. Dislodge the pellet by vortexing and combine multiple substrate tubes, if applicable.
    a. Depending on the number of multiple substrate tubes, the cells may be re-pelleted and excess buffer removed.
6. Samples are ready for appropriate extraction procedure.

4. References

N/A

5. Definitions

Supernatant: liquid portion of solution above a cellular pellet after centrifugation. The supernatant is used for immunoassay serological tests.