RSV & Influenza A/B PCR Specimen Handling and Storage

PURPOSE

- This procedure provides instructions for specimen acceptability, handling and storage
- Refer to the Lab Test Directory for test specific patient preparation and specimen collection information.

ABBREVIATIONS

- RIP – Simplexa™ RSV & Influenza PCR Direct
- UTM – universal viral transport media

SAMPLE

A. Acceptable specimens and transport container

Specimen type	Specimen code	Volume	Transport Containers
2 Nasopharyngeal swabs	**NP**	2 wire NP swabs	▪ NP CultureSwab™ Rayon wire mini-tip swab in Liquid Stuart's, green top
Nasal aspirate	**NASP**	1 – 2 mL (0.5 ml minimum)	▪ Sterile, plastic leak proof container
Nasal washing	**NW**		

B. Unacceptable specimens: Calcium alginate swabs, nose swabs, sputum, throat swabs, tracheal secretions

C. Transport and Storage: For additional information refer to Lab Test Directory

Temperature Refrigerated , 2 - 8° C	Sample Stability in UTM
▪ NP swabs	▪ 3 days
▪ Nasal aspirate/wash	▪ 5 days

SAFETY CONSIDERATIONS

- Standard precautions. Refer to MB 2.02 Biohazard Containment
- Use of engineering controls: Refer to MB 3.01 Engineering Controls to Prevent Nucleic Acid Contamination

MATERIALS REQUIRED

Equipment	Media	Supplies
BioSafety Cabinent (BSC)	UTM with glass beads	Nitrile gloves
Refrigerator, 2 - 8° C		Dispo pipettes
Vortex mixer		Sterile scissors
		2.0 ml cryovials

PROCEDURE A: Follow the activity below for sample handling

Activity	Step	Action	Related Doc
ID Location: Microbiology	1	Verify that the patient identification on the primary container corresponds to the accompanying order	MB 1.01 Specimen Management
	2	Receive sample in Sunquest and generate label ▪ Sunquest location: MC ▪ Sunquest code: RIP	Organizational policy 630.00 Laboratory Specimen Labeling
	3	Confirm the name on the label is the same as the name on primary container	
	4	Affix LIS accession label to corresponding primary container	
Quality	5	Evaluate the quality of the specimen.	MB 1.02 Specimen Rejection Criteria
Process	6	Vortex NW samples to obtain an even suspension	
	7	Transfer 1 – 2 ml of NW sample or cut the shaft of 2 NP swabs into UTM ▪ Note: If NP swabs are used, leave swabs in UTM; do not discard	
	8	Vortex for 30 – 60 s to break up mucus and release virus from cells	
Store	9	Store specimen refrigerated at 2 - 8° C	
	10	Place specimen and label in molecular designated area	
Aliquots	11	If additional testing is necessary, refer to Procedure B: **Sample Aliquots**	

PROCEDURE B: Follow the activity below for aliquoting samples and preventing cross-contamination

Sample Aliquots

Activity	Step	Action	Related Doc
Identification of secondary container	1	Sample identification of all aliquots must be traceable to the primary specimen	Organizational policy 630.00 Laboratory Specimen Labeling
	2	Confirm the name and accession number on the aliquot label is the same as on the primary container	
	3	Affix LIS aliquot label with corresponding accession number on secondary container	
Avoiding cross-contamination	4	Handle specimens to avoid cross contamination of primary sample and aliquots as follows: Step / Action a – Deliver primary specimens unopened to the molecular laboratory when possible or perform the following steps b – Properly label secondary container with patient aliquot label c – Verify name on primary and secondary container before transfer d – Use sterile pipettes and technique when transferring samples e – Aliquot one specimen at a time with only one tube open at a time f – Never return the aliquot to the original container	Refer to assay specific procedures for additional information

REFERENCES

1. Simplexa™ *Flu A/B & RSV* Direct Circular PI.MOL2650.IVD, Rev. F, 18-September-2015, Focus Diagnostics, Cypress, CA 90630
2. CLSI. Collection, Transport, Preparation and Storage of Specimens for Molecular Methods. 2005; CLSI document MM13-A, Wayne, PA
3. *Simplexa* RSV & Flu A/B Direct PCR Clinical Verification and Validation Study performed at Children's Hospitals and Clinics of MN, 2016
4. Andrea J. Linscott, Section editor, *Specimen Collection, Transport, and Acceptability,* 2.1. In Lynne S. Garcia (ed) *Clinical Microbiology Procedures Handbook,* Third edition 2010, American Society for Microbiology, Washington, D.C.
5. J. Michael Miller, A guide to *Specimen Management in Clinical Microbiology*, 1999, ASM Press, 1325 Massachusetts Ave NW, Washington, DC

Historical Record

Version	Written/Revised by:	Effective Date:	Summary of Revisions
1	P. Ackerman	11.20.16	Initial Version