BioReference LABORATORIES an **OPKO** Health Company

COVID-19 Specimen Collection Guidelines

Authorized Alternate Collection Options Due to Critical Shortages of Transport Media and Swabs



GENERAL COLLECTION COMMENTS

As of March 24, 2020, the FDA and CDC recommend collecting and testing an upper respiratory specimen with a nasopharyngeal collection (NP), as the preferred choice for swab-based SARS-CoV-2 testing. If a NP specimen cannot be collected, alternate collection sites are acceptable and detailed below. Refrigerate specimen at 2-8° C. Label with patient name. Place in specimen bag and label with "COVID-19" and submit to laboratory.

Flocked plastic NP swabs in universal or viral transport media (UTM/VTM) at 3 mL volume are preferred. The FDA has made alternative recommendations in the context of limited quantities of testing supplies during this public health crisis, based on the best available evidence and in consultation with outside experts. When considering alternate swab types, use only synthetic fiber swabs with plastic shafts, and transport in 3 mL of media. Do not use calcium alginate swabs or swabs with wooden shafts, as they may contain substances that inactivate some viruses and inhibit PCR testing.

Please refer to the most current CDC guidelines for Evaluating and Reporting Persons Under Investigation for further information. www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html and the FDA FAQs on Diagnostic Testing for SARS-CoV-2 "What If I Do Not Have...?" www.fda.gov/medical-devices/emergency-situations-medical-devices/faqs-diagnostic-testing-sars-cov-2

SUMMARY OF INFORMATION FROM FDA EMERGENCY USE AUTHORIZATION FAQ (REVIEWED ON MARCH 24, 2020)

Specimen collection supplies continue to be difficult to obtain. If NP swabs and UTM/VTM transport media supplies run critically short, we are able to accept the following collection types, based on updated FDA guidance for COVID-19 testing.

ALTERNATE MEDIA

Volumes lower than 3 mL increase the risk of Invalid results or Quantity Not Sufficient (QNS). For vials that contain less than 3mL of media, client MUST add saline to bring the media volume to 3 mL in the vial before sending in for testing.

- CDC VTM Formula
 - Media can be prepared following procedures using the CDC formula: www.cdc.gov/coronavirus/2019-ncov/downloads/Viral-Transport-Medium.pdf
- Liquid Amies-based media
 - Liquid Amies media may be used for viral transport when UTM is not available.
- Sterile Saline
 - Using a sterile glass or plastic vial containing 3 mL of phosphate buffered saline is preferred

ALTERNATE SWABS

- Oropharyngeal (OP) swabs are acceptable in the absence of Nasopharyngeal (NP) swabs.
- Mid-turbinate (flocked tapered swab)or anterior nares (round foam swab) specimens are acceptable in the absence of NP
 - May be collected by a health care professional or selfcollected onsite.
 - For symptomatic patients, and both nares should be swabbed. There is currently not enough evidence for midturbinate or nasal swabs in asymptomatic patients.
 - Multiple specimens may be taken with a single swab.
- If separate swabs are used in the same patient at different sites, both swabs may be placed in the same vial.
- Flocked swabs are preferred, when available. Avoid swabs with calcium alginate and wooden shafts, which may inhibit testing.
- Buccal swabs and saliva do not currently have sufficient evidence for use.

PRODUCTS LISTED BY THE FDA FOR USE DURING THE COVID-19 EMERGENCY

NOTE: This is not an all-inclusive list.

BIOREFERENCE PREFERRED SPECIMEN TYPE

Nasopharyngeal flocked plastic swabs with Universal or Viral Transport Media at 3 mL volume.

	ALTERNATE		
M6 MicroTip Flock Swab (BioReference Speedy Number 510)	M4 MicroTip Flock Swab (BioReference Speedy Number 510)	Star Swab (BioReference Speedy Number 510)	Swab Viral Culturette (BioReference Speedy Number 509)
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OTHER UNIVERSAL TRANSPORT MEDIA FOR VIRUSES AND MOLECULAR TRANSPORT MEDIA

All of the products listed below include a NP flocked swab unless noted otherwise.

For those vials that contain less than 3mL of UTM, client MUST add saline to bring the media volume to 3 mL in the vial before sending in for testing. Volume requirements for COVID-19 testing are 3 mL.

DISTRIBUTOR/ MANUFACTURER	PART NUMBER: NAME									
	305C: Flexible Minitip Nylon 307C: Minitip Nylon Flocked Flocked Swab with 3 mL Swab with 3 mL UTM® UTM® Medium Medium		360C: Flexible Minitip Nylon Flocked Swab with 1 mL UTM [®] Medium		519CS01*: Regular Nylon Flocked Swab with 100mm Breakpoint					
Copan					,					
Puritan	UT-367: Puritan UniTranz-RT 3ml Filled Vial w/ Elongated & Ultrafine Flock Swabs	I Vial w/ Elongated & 3ml Filled Vial and 6" Steri		an UniTranz-RT w/ Sterile Mini- Polyester Swabs	UT-366**: Puritan UniTranz-F 3ml Filled Vial w/ Sterile Mini tip & Standard Polyester Swal	i- RT 3ml Universal Transport				
	220526: 1 mL Vial, one sterile	Nylon 220258*: 3mL Vial	ono storilo Nylon	220520: 2m	L Vial, one sterile Nylon 22	20531: 3mL Vial, one sterile mini-tip				
	flocked flexible flocked tip swab Plastic shaft (Regular Flocked	scored flocked tip swab, so	cored Plastic shaft	flocked tip sw	vab, scored Plastic shaft ni Flocked Tip)	swab, scored Plastic shaft (Mini Flocked Tip)				
BD		See Sec. 1		S. GPD Desension S. GPD Termine The Second S						
	330CHL: 3 mL UTM in 10 mL s Each tube	ize screw cap with internal-shap contains 3 3-mm glass beads.	ed conical bottom.	503CS01: Flexible minitip plastic applicator, nylon fiber tip, sterile in peel pouch, 100 mm breakpoint.						
DHI/Quide!										
	23001718: Copan UTM-RT, 16x100mm Conical Tube with beads, 3ml fill, without swabs; Product also distributed by: Hardy/Healthlink: #330CHL	23600952: Copan Nylon Flocked Dry Swabs in Peel Pouches Flexible minitip flocked 4"	23600956: Flocked Dry S Pouches Mini	Swabs in Peel	23600950: Copan Nylon Flocked Dry Swabs in Peel Pouches Minitip flocked 3.14					
Fisher Healthcare (Products by Copan)										
	LH-1-02: F	PrimeStore MTM [®] 2 mL Tubes		LH-1-03***: PrimeStore MTM® 3 mL Tubes						
PrimeStore MTM	meStore MTM				primarkani MIM J					

LIQUID AMIES MEDIA

May be used for viral transport when universal transport media is not available. All of the products listed below include a nasopharyngeal (NP) flocked swab unless noted otherwise.

Client MUST add saline to bring the volume to 3 mL in the vial before sending in for testing. E-swabs generally only contain only 1mL of fluid, and volume requirements for COVID-19 testing are 3 mL.

DISTRIBUTOR/ MANUFACTURER			PART NUM	BER: NAME				
Copan	 481C: ESwab Single Minitip Size Nylon[®] Flocked Swab with 80mm Breakpoint packaged with 1 mL Liquid Amies Medium in Skirted Tube with Plastic Green Non-Capture Cap (<i>BioReference Speedy #513</i>) Product also distributed by: Hardy/Healthlink: #481C WR: #89136-656 Fisher Healthcare: #23600901 	Size Nylon [®] Breakpoint µ Amies Me Plastic (<i>BioRef</i> Produ Hardy VV	vab Single Flexible Minitip Flocked Swab with 100mm packaged with 1 mL Liquid dium in Skirted Tube with Blue Non-Capture Cap ference Speedy #514) ct also distributed by: //Healthlink: #482C WR: #89136-658 lealthcare: #23600902	480C*: ESwab Single Ra Nylon® Flocked Swab w Breakpoint packaged with Amies Medium in Skirted Plastic White Captur (<i>BioReference Speet</i> Product also distribu Hardy/Healthlink: # WWR: #89136-6 Fisher Healthcare: #23	ith 80mm 1 mL Liquid d Tube with re Cap dy #502) ted by: t480C* 54*	 480CFA*: Single Regular Size Nylon® Flocked Swab with 80mm Breakpoint packaged with 1 mL Liquid Amies Medium in Skirted Tube with Plastic Purple Non-Capture Cap Product also distributed by: Hardy/Healthlink: #480CFA* VWR: #76181-494* Fisher Healthcare: #23600905* 		
		~	A MARKET AND A MAR	2 Turning				
Puritan	LA-117: Blue Opti-Swab 1ml Liquid Amie Medium w/ 6"Ultrafine Flock Swab 1ml L Medium Filled Vial & Sterile Ultrafine Hy Applicator	iquid Amies			LA-100***: White Opti-Swab 1ml Sterile Liquid Amies Transport Medium - Vial Only 1ml Liquid Amies Transport Medium			
	220246: Includes Polypropylene screw-c 1mL of liquid Amies medium with a Gree minitip swab with flocked Nylon Fib	en cap, one	220245*: Includes Polypro 1mL of liquid Amies medi regular swab with flo	um with a White cap, one	220532: Includes Polypropylene screw cap tube with 1mL of liquid Amies medium with a Blue cap, one flexible minitip swab with flocked Nylon Fiber tip			
BD								
	R723481: ESwab Green Minitip Flocked	Collection Kit	R723482: ESwab Blue N	PG Flocked Collection Kit	R723480*: ESwab White Regular Flocked Collection Kit			
ThermoFisher								
flocked oropharyngeal	swab ** Polyester swa	<i>b</i>	*** ПО SW	ab.	£ 1	ōam swab		

* flocked oropharyngeal swab

** Polyester swab

*** no swab

STERILE SALINE

Can be used if no alternate transport media is available. All the products listed below do not include a swab. Tubes should contain 1-3 mL of saline. *Client MUST add additional saline to bring the volume to 3 mL in the vial before sending in for testing. Saline vials generally only contain only 1-2 mL of fluid, and volume requirements for COVID-19 testing are 3 mL.*

DISTRIBUTOR/ MANUFACTURER	PART NUMBER: NAME										
	R064430: Thermo Scientific [™] Saline 0.85% Solution Tubes		1064432: Thermo Scientific™ Saline 0.85% Solution Tubes		mo Scientific™ Solution Tubes	R064436: Thermo Scientific [™] Saline 0.85% Solution Tubes		R064438: Thermo Scientific [™] Saline 0.85% Solution Tubes			
ThermoFisher											
Hardy/ Healthlink	D185: Saline, 0.85%, 1.8ml, 12x75mm tube, order by the package of 100, Black Top		K248: Saline, 0.85%, 1ml, 15x103mm tube, optically clear, shatter resistant, polycarbonate tube, order by the package of 20, Blue top		R45: Saline, 0.85%, 2ml, 13x100mm tube, optically clear, shatter resistant, polycarbonate tube, order by the package of 20, Blue top		R55: Saline, 0.85%, 2ml, 13x100mm EP glass tube, order by the package of 20, Black top				
Edge Biologicals	T-0625:	Sterile Saline .8	5% 0.9mL		T-0110: Sterile Saline .85% 1mL						
		No Photo Available									
* flocked oropharyngeal	swab ** Polye	ester swab		*** NO SW	ab	f Foam swab					

INDIVIDUALLY WRAPPED SWABS

All swabs are flocked unless noted otherwise.

DISTRIBUTOR/ MANUFACTURER			PART NUM	BER: NAME				
	ophangeal		25-800 1PD 50**: Puritan 6" Sterile Mini-tip Polyester Swab w/ Ultra- Fine Polystyrene Handle	25-3320-U: PurFlock Ultra 6" Sterile Revised Ultrafine Flock Swab w/ Polystyrene Handle, 100mm Breakpoint	25-3320-H EMB 80: HydraFlock 6" Sterile Revised Ultrafine Flock Swab w/ Polystyrene Handle, 80mm Breakpoint	25-3320-U EMB 100: PurFlock Ultra 6" Sterile Revised Ultrafine Flock Swab w/ Polystyrene Handle, 100mm Breakpoint		
Puritan – Nasophangeal Swabs								
Copan – Nasophangeal Swabs	Flocked Swab with 100mm Breakpoint with Product also distributed by: Produ		iinitip Nylon Flocked Swab 100mm Breakpoint ct also distributed by: ealthcare #23600956	501CS01: Minitip Nylor with 80mm Bre Product also distri Fisher Healthcare	akpoint wi buted by:	502CS01: Regular Nylon Flocked Swab with 80mm Breakpoint		
BD – Nasophangeal Swabs	2202	252: Regular flocked swat	0	220251: Minitip flocked swab				

— Continued on next page —

INDIVIDUALLY WRAPPED SWABS (CONTINUED)

All swabs are flocked unless noted otherwise.

DISTRIBUTOR/ MANUFACTURER	PART NUMBER: NAME												
DHI/Quidel – Nasophangeal Swabs				503CS0	1.DHI: Flexit	le Minitip Flo	oq Swabs						
Puritan – Oropharyngeal Swabs	25-1506 1PF SOLID': Puritan 6" Sterile Standard Foam Swab w/ Plastic Handle & Dry Transport Tube	25-1506 1PF 10 Puritan 6" Steri Standard Foam S w/Polystyrene Har	ile HydraFloo wab Elonga ndle Swab w/f Handle	206-H: k 6" Sterile ced Flock Polystyrene , 20mm kpoint	PurFlock Sterile E Flock S Polystyre	206-U: (Ultra 6" longated iwab w/ ne Handle reakpoint	HydraFlo Elonga Swab w Handle	3706-H: ack 6" Sterile ated Flock /Polystyrene e, 100mm akpoint	Purit Stand Sw	806 1PD**: tan 6" Sterile dard Polyeste vab w/Solid tyrene Handle	r : F	25-806 1PD BT**: Puritan 6" Sterile Standard Polyester Plastic Handle Swab & Tube	
Copan - Oropharyngeal Swabs	Flocked Swab with 80r Breakpoint Product al distributed by:	Fisher Healthcare Fisher Hea		d Śwab Polyester Swab w/ Plastic Rayo kreakpoint Applicator Product also tributed by: distributed by: tthcare Fisher Healthcare			Rayon Swab w/ Plastic Rayon Sv Applicator Applica dia Fishe		Swab w/ icator Pro distribute sher Hea	tor Product also w		175KS01**: Regular Polyester Swab w/ Aluminium Applicator roduct also distributed by Fisher Healthcare #1490650**	
BD				22	0250: Regul	ar flocked sv	vab		<u>.</u>				
Oropharyngeal swabs:					_								
Additional sterile flocked swabs from Puritan that may be used:	PurFlock Ultra 6" HydraFlock 6" Pu Sterile Mini-tip Sterile Mini-tip St Flock Swab Flock Swab w/ w/ Polystyrene w/ Polystyrene w Handle, Cust. Handle, Cust. Handle, Cust.		Sterile Ultrafine Flock Swab w/ Polystyrene	PurFlock Ultra 6" PurFlock Ultra Hydra Sterile Ultrafine 6" Sterile Sterile Flock Swab Micro Ultrafine Flock w/ Polystyrene Flock Swab w/ Pol Handle, 100mm w/ Polystyrene Handl			5-3318-H: rdraFlock 6" rile Ultrafine Polystyrene ndle,100mm Breakpoint Polystyrene Preside Ultrafine Polystyrene Polystyrene Polystyrene Polystyrene Polystyrene Handle		ltra e afine ab	Sterile Revised Ultrafine Flock Swab w/		25-3319-H: HydraFlock 6" Sterile Ultrafine Flock Swab w/ Polystyrene Handle, Cust. Breakpoint	
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Note: All product names and images obtained from individual manufactures' websites.

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