



Dual-Target SARS-CoV-2 STAR Complete

ENGLISH

REF L018180801096

This Product Insert is not a complete set of instructions. Read the full Instructions for Use (IFU) and Quick Reference Instructions (QRI) thoroughly for LumiraDx Dual-Taraet SARS-CoV-2 STAR Complete before use.

A free paper copy of the full IFU and QRI can be obtained by contacting us at +44 (0) 1172 842 535 or customerservices@lumiradx.com.

# Intended Use

The LumiraDx Dual-Target SARS-CoV-2 STAR Complete is a rapid, non-isothermal nucleic acid amplification test (NAAT) utilizing qSTAR (quantitative Selective Temperature Amplification Reaction) technology for the detection and differentiation of nucleic acid from two distinct genes (nsp1 & ort8) from the SARS-CoV-2 genome in nasopharyngeal or anterior nasal swab samples collected dry or in a transport medium from individuals susceted of COVID-19.

Results are for the identification of SARS-CoV-2 nucleic acid. SARS-CoV-2 nucleic acid is generally detectable in upper respiratory samples during the acute phase of infection. Positive results are indicative of the presence of SARS-CoV-2 nucleic acid; clinical correlation with patient history and other diagnostic information is necessary to determine patient infection status. Positive results do not rule out bacterial infection or co-infection with other viruses. The agent detected may not be the definitive cause of disease. Negative results do not preclude infection with SARS-CoV-2 and should not be used as the sole basis for patient management decisions. Negative results must be combined with clinical observations. patient history, and evaluation information.

LumiraDx Dual-Target SARS-CoV-2 STAR Complete is intended for use by qualified clinical laboratory personnel specifically instructed and trained in the techniques of real-time PCR and in vitro diagnostic procedures.

Laboratories may be required to report all positive results to the appropriate Competent Health Authorities.

## Package Contents and Volumes

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COMPONENT	96-WELL (L018180801096
Dual-Target SARS-CoV-2 STAR Complete	
Positive Control Media (PCM)	250 µL
Dual-Target SARS-CoV-2 STAR Complete	
Negative Control Media (NCM)	1.5 mL
Dual-Target SARS-CoV-2 STAR Complete	
Salt Mix	1.0 mL
Dual-Target SARS-CoV-2 STAR Complete	
Extraction Buffer	500 µL
Dual-Target SARS-CoV-2 STAR Complete	
Internal Control & Primer Mix (IC/P Mix)	200 µL
Dual-Target SARS-CoV-2 STAR Complete	
Master Mix	2.0 ml

#### Warnings and Precautions

For a list of warnings and limitation see the Instructions for Use for the LumiraDx Dual-Target SARS-CoV-2 STAR Complete kit.

## Storage Instructions

Upon receipt, store LumiraDx Dual-Target SARS-CoV-2 STAR Complete kit components at between -15 °C and -25 °C. Refer to the LumiraDx Dual-Target SARS-CoV-2 STAR Complete IFU before opening and preparing reagents.

## Sample Collection, Handling, Storage, and Transport

Proper collection and handling of specimens is critical to laboratory diagnosis of infectious diseases. A specimen that is not collected correctly may lead to incorrect test results. Testing for respiratory viruses should be conducted in consultation with a healthcare provider. Specimens should be collected as soon as possible once a decision has been made to pursue testing, regardless of the time of symptom onset. Training in specimen collection is halv recommended due to the importance of specimen auditiv.

## Sample Transport

 Specimens must be packaged, shipped, and transported according to the current edition of the International Air Transport Association (IAIA) Dangerous Goods Regulation. Follow shipping regulations for UN-3373 Biological Substance, Category B when sending potential SARS-Cov2 specimens.

Samples must be shipped in accordance with applicable local, regional, national, and international transportation regulations.
 Maintain sample storage conditions as described below when transporting specimens.

## Sample Collection and Handling

- Follow the sample collection device's instructions for proper collection and handling procedures.
- Swab specimens should be collected using only swabs with a synthetic tip, such as nylon or Dacron<sup>®</sup>, and an aluminum or plastic shaft. Calcium alginate swabs are unacceptable and cotton swabs with wooden shafts are not recommended.
- Wet swab: specimens should be collected and placed into appropriate transport medium, such as Corning Transport Medium (Catalog# 25:500-CM) or medium of similar formulation, 0.85% or 0.9% soline solution, or 1x PBS (pH 7.4). Swabs provided in up to 2 and 4 comparison of the placement of the placeme
- 3 mL of compatible transport medium are acceptable, however, for optimal performance. I mL of buffer is suggested. Ony swab: specimens should be collected and placed in a sterile, dry transport tube, such as a standard 15 mL Falcon tube. For elution of a dry swab specimen, add 1 mL of compatible transport medium and recap tube. Vortex the tube containing the swab for 30 seconds with intermittent pulsing. Incubate the swab at room temperature for at least 10 minutes. Remove and discard the swab in the biohorard waste

# Sample Storage

- · Always follow the manufacturer's instructions for proper storage of samples.
- Dry swab specimens are stable either at room temperature for up to 48 hours or refrigerated (2-8 °C) for up to 72 hours before
  processing.
- Wet swab specimens should be stored refrigerated (2–8 °C) for up to 72 hours before processing. If a delay in testing is expected, store specimens at -20 °C or below for up to 6 days.
- If specimens cannot be tested within 72 hours of collection, both dry-swab and wel-swab specimens should be frozen may be frozen at s -20 °C for up to 6 days until tested.

#### Sample Processing Dry Swab (Standard Format)

- If swab is provided dry, transfer one (1) mL of a compatible transport medium into the tube and recap tube.
- 2. Vortex the tube containing the swab for 30 seconds with intermittent pulsing.
- 3. Incubate the swab at room temperature for at least 10 minutes.
- 4. Remove and discard the swab in biohazard waste.

#### Dry Swab (Deep Well Format)

1. If swab is provided dry, transfer one (1) mL of a compatible transport medium into appropriate wells, leaving A1 and A12 empty for external controls.

Place and soak the swab for at least 10 minutes then swirt thoroughly by rotating the swab against the side of each well up to 5 times.
 Express the swab on the side of each well, outside of the liquid, prior to removing (beware of cross-contamination from splashing).
 Remove and discard the swab in biohazard waste.

Wet Swab

1. If swab specimen is provided wet, up to 3 mL of compatible transport medium is acceptable, though this higher volume may impact sensitivity.

### 96-Well Format Control, Samples, and Extraction Buffer

- 1. Thaw PCM, NCM, and Extraction Buffer on a cold block and vortex for 5 seconds then centrifuge for 5 seconds to collect reagents at the bottom of the tube.
- 2. Directly transfer 23.0 µL of PCM, 23.0 µL of NCM, and 23.0 µL of sample to the appropriate wells of the pre-chilled RT-PCR plate.
- 3. Add 5.0  $\mu\text{L}$  of Extraction Buffer to each well containing a control or sample.
- 4. Pipette up and down 10 times to mix without generating bubbles.
- 5. Seal the plate with sealing film and place at 65 °C for 5 minutes, then immediately place the RT+PCR plate back on the cold block. Note: If condensation is present, the plate may be spun down to collect the liquid at the bottom of the wells.

#### 96-Well Format Reaction Mix

- 1. Thaw Salt Mix, IC/P Mix and Master Mix on a cold block.
- 2. Obtain a sterile (RNase/DNase free) tube and place on cold block.
- 3. Determine the number of reactions (N) to be prepared per assay:

REACTION MIX SETUP	1 REACTION	100 REACTIONS	N REACTIONS
Salt Mix	10.0 µL	1000 µL	N x 10.0 µL
IC/P Mix	2.0 µL	200 µL	N x 2.0 µL
Master Mix	20.0 µL	2000 µL	N x 20.0 µL
Total Volume	32.0 µL	3200 µL	N x 32.0 µL

- Vigorously vortex the Salt Mix for 20 seconds, centrifuge for 5 seconds to collect reagent at the bottom of tube, and IMMEDIATELY
  add the appropriate volume to the pre-chilled microcentrifuge tube.
- Invert the IC/P Mix and Master Mix to mix then centrifuge for 5 seconds to collect reagents at the bottom of the tube (do not vortex samples), and IMMEDIATELY add the appropriate volume to the Satt Mix.
- 6. Mix thoroughly for at least 10 seconds (avoid creating bubbles). Centrifuge briefly (do not vortex and do not spin down for an excessive amount of time). Then place tube back on the cold block.
- 7. Invert the Master Mix to mix then centrifuge for 5 seconds to collect reagents at the bottom of the tube (do not vortex samples), and
- IMMEDIATELY add the appropriate volume to finalize the Reaction Mix. 8. Mix thoroughly for at least 10 seconds (avoid creating bubbles). Centrifuge briefly, then place tube back on the cold block.
- Mix moloughly for all least to seconds (avoid cleaning bubbles). Certifiliage bitely, then place tube back on the cold block.
   Carefully remove the sealing film and add 32.0 uL of Reaction Mix to each well with control or sample, pipetting up and down
- 10 times to mix without generating bubbles.
- 10. Apply the optical adhesive plate film. Centrifuge the plate for at least 20 seconds at 2000 rpm to collect the reaction mix at the bottom of each well, confirming that no bubbles persist. If bubbles are observed repeat this step.
  11. Place the Sevell plate in the RFPCR instrument and run the appropriate thermal profile.

## Interpretation/Performance/Limitations

Users should refer to the LumiraDx Dual-Target SARS-CoV-2 STAR Complete IFU for interpretation of results, performance and limitations.

#### For Return Policy

If there is a problem with the LumiraDx Dual-Target SARS-CoV-2 STAR Complete Kit you may be asked to return the item. Before returning, please obtain a return authorization number from LumiraDx Customer Services (CustomerServices@LumiraDx.com). This return authorization number must be on the shipping carton for return. For ordinary returns following purchase, please contact LumiraDx Customer Services for terms and conditions.

#### Limited Warranty

LumiraDx Duai-Target SARS-CoV-2 STAR Complete Kit – As per shelf life. Unused product must be stored according to the required storage conditions as printed in this product insert and, they can be used only up to the expiry date printed on packaging. For the applicable warranty period, LumiraDx warrants that acch product shall be (t) of good quality and free of material defects, (ii) function in accordance with the material specifications referenced in the product insert, and (iii) approved by the proper governmental agencies required for the sale of products for their intended use (the "limited warranty"). If the product fails to meet the requirements of the limited warranty, then as customer's sole remedy, LumiraDx shall either repair or replace, at LumiraDx's discretion, the product. Except for the limited warranty stated in this section, LumiraDx shall either repair or replace, at LumiraDx's discretion, the product. Except for the limited warranty of merchantability, fitness for a particular purpose and non-infringement regarding the product. LumiraDx's maximum liability with any customer claim shall not exceed the net product price paid by the customer. Neither party shall be liable to the other party receives notice in advance that these kinds of damages might result. The Limited Warranty above shall not apply if the customer has subjected LumiraDx Dual-Target SARS-CoV-2 STAR Complete to physical abuse, misuse, abnormal use, use inconsistent with product insert provided, fraud, tampeting, unusual physical stress, negligence or, accidents. Any warranty takes us using the the target lumited warranty berind.

#### Intellectual Property

The LumiraDx Kit and all provided LumiraDx documentation ("Products") are protected by law. The Intellectual Property of the LumiraDx Products remains at LumiraDx. Details of relevant Intellectual Property regarding our products can be found at LumiraDx.com/IP.

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## Reagent Complaints/Questions

If you have a question/comment about this product, please contact LumiraDx by email at CustomerServices@LumiraDx.com. Please include "LumiraDx Dual-Target SARS-CoV-2 STAR Complete" in the subject line.

Glossary of Symbols				
Temperature limitation		Use-by Date - The date after which the unopened reagent cannot be used	***	LumiraDx UK Ltd. Unit 50, Yorkshire Way
IVD In vitro diagnostic medical device	∑, n'	Contains sufficient reagent for 'n' reactions		+44 (0)1172 842535
REF Catalog Reference Number	(li	Refer to www.lumiradx.com for the electronic form of the Instructions for Use	۲	LumiraDx B.V. Looskade 20 6041 LE Roermond
LOT Lot Number/Batch Code	CONTROL +	Positive Control Media		The Netherlands
Manufacturer	CONTROL -	Negative Control Media		221 Crescent Street
CE Mark of Conformity	EC REP	Authorized representative in the European Community		Waltham, MA 02453 +1-617-621-9775
European Importer			۲	LumiraDx 6650 Nancy Ridge Drive

- 6650 Nancy Ridge Drive San Diego, CA 92121, USA
- Uncontaminated recycled content packaging, kit box, Instructions for Use is recyclable if it can be collected, separated, or otherwise recovered from the waste stream through an established recycling a program.
  - Product Insert SD-COM-ART-00223 Rev 3 Rev Date 2022/09