

Catalogue of Products  
and Services / 01-2023

Multiplex



We are developing  
multiplexed, accurate,  
quantitative  
**DIAGNOSTIC TESTS  
& SOLUTIONS**

# About MultiplexDX

Founded by a Slovak scientist in the US, who previously worked at the top research and government institutions, MultiplexDX is one of the most innovative biotech companies, created to bring its revolutionary technologies to the market of **personalized molecular diagnostics**.

Based on the **scientific breakthrough of Dr. Cekan (CEO)** and Prof. Tuschl (Rockefeller University), the company is developing an innovative multiplexed BCa diagnostic (DX) test reducing misdiagnosis to almost 0% in a single test.

MultiplexDX IP-based and innovative platforms merge histopathology methods, biomarker quantification, visualization, and gene expression with a single-cell resolution by combining MDX proprietary visual and sequencing technologies. This cross-validation approach eliminates diagnostic errors and creates precise cancer profiling, which enables clinicians to suggest targeted and personalized treatment for each individual patient. This approach will reduce unnecessary, life-affecting treatments, saving lives and healthcare costs.

MultiplexDX is a proud EIC accelerator project holder, a funding instrument for empowering startups and SMEs to develop and scale up breakthrough innovations. In 2022, MultiplexDX ranked in the Top 3 at the Deloitte Technology Fast 50, a renowned program recognizing the fastest-growing technology companies in Central Europe. In both cases, MultiplexDX achieved awards as **the first Slovakian company in history**.

In 2020, as a response to the global pandemic, MultiplexDX developed the first Slovak IVD-certified diagnostic PCR test for the detection of SARS-CoV-2. The company developed and certified **11 RT-PCR tests**, LAMP COVID-19 tests, and mobile testing infrastructure solutions helping to test local outbreaks in remote areas. The tests have been registered, validated, and certified in 26 countries, including the prestigious RIVM National Reference Laboratory in the Netherlands. In addition, they have passed the External Quality Assessment, organized by the European Centre for Disease Prevention and Control (ECDC).

In the pandemic years of 2021 & 2022, MultiplexDX invested significant resources from the COVID-19 pandemic's sales to improve its research infrastructure, accelerate personalized cancer diagnostics and finalize pre-clinical validation for its breast cancer test.

We at MultiplexDX are trying to have a positive impact in numerous fields – from innovation, science, or business to society. Thus, the company delivered its RT-PCR tests as humanitarian aid to several countries like Kenya, Ukraine, the Vatican, Serbia, Montenegro, and Moldova. In 2023, the MultiplexDX team will close up the retrospective clinical validation and follow up with the procedures required for starting the prospective clinical validation.

## Commitments

- International team of 28 employees (25 R&D)
- Scientific excellence
- Commitment to quality
- ISO-15189 certified
- Total control over the manufacturing process
- High flexibility in the development of diagnostic solutions
- Competitive prices

## Year 2022



# History

2016

- Establishment of the company in the US
- Winner of the Startup Awards
- Investment by Neulogy Ventures



2017

- Establishment of a daughter company in Slovakia



2018

- Investment by Crowdberry & Ron Cook
- Won the JCI Creative Young Entrepreneur Award 2018
- Won the CES Awards as the Best Social Impact Startup



2019

- Became an official member of the Oslo Cancer Cluster
- Recieved a prestigious EIC Accelerator Project
- Won a project for the Ministry of Health of the Slovak Republic



2020

- The 1st CE-IVD COVID-19 RT-qPCR test
- Conducted and involved in several humanitarian activities



2021

- MDX developed 11 CE-IVD certified RT-qPCR tests
- Developed and commercialized the LAMP COVID-19 test
- President of the European Commission, Ursula von der Leyen, visited our company and our mobile testing solution
- Pavol Čekan was awarded the 2nd highest presidential medal from the President of the SR
- Officially resumed the Multiplex8+ project



2022

- Conducting a Retrospective clinical validation of the Multiplex8+ on a massive dataset of 1000 tissues
- Became the 1st company in the TOP 3 Deloitte Fast 50 CEE



For more information on 2022 successes, see the infographics in the infographics in the foreword.







## Dr. h. c. **Pavol Čekan**, PhD. Founder & CEO

### About

Dr. Cekan is an innovative leader with 15+ years of experience at top research and government institutions. He received his doctorate in chemistry from the University of Iceland. As a Postdoctoral Associate in Tuschl lab at Rockefeller University, Dr. Cekan developed methodology and diagnostic application for the innovative and patented miRNA/mRNA/ncRNA fluorescence in situ hybridization. He worked at the National Cancer Institute for four years, leading scientific teams and projects.

In 2016, Dr. Cekan founded a new company for novel cancer diagnostic technologies and applications, MultiplexDX. As a Founder, he won the prestigious 2016's Startup Awards. In the following years, Dr. Cekan and MultiplexDX won numerous awards. The most prestigious of them is the Order of Ludovit Stur II (the 2nd highest presidential medal from the President of the Slovak Republic) which is awarded only to citizens who made an extraordinary effort to reach the highest possible level in their profession and represent Slovakia as a country in the international scene.





# List of Products and Services

## COVID-19 DIAGNOSTICS

- rTEST COVID-19 qPCR SuperRapid kit
- rTEST COVID-19 qPCR Rapid Kit
- rTEST COVID-19 qPCR Allplex kit
- rTEST COVID-19 qPCR Superplex Kit
- rTEST COVID-19/FLU qPCR kit
- Vivid COVID-19 LAMP Direct-G kit
- Mobile COVID-19 Infrastructure solutions
- rTEST COVID-19 qPCR Multiplex kit
- rTEST COVID-19 qPCR Multivariant Kit
- rTEST COVID-19 qPCR B.1.1.7 kit
- rTEST COVID-19 qPCR kit
- Coronavirus qPCR probes and primers

## OTHER INFECTIOUS DISEASES DIAGNOSTICS

- Antigens for diagnosis of selected infectious diseases
  - Chlamydia antigens
  - Coxiella burnetii antigens for diagnosis Q-fever

## CUSTOM OLIGONUCLEOTIDES

- Oligonucleotide synthesis on demand

## RNA SEQUENCING

- Barcoded pre-adenylated 3'-adapters
- Fluorescently labelled pre-adenylated 3' adapters

## RNA FISH

- FullRNAlook

## NEXT GENERATION SEQUENCING & BIOINFORMATICS

- Sequencing & Bioinformatics

## BREAST CANCER DIAGNOSTICS (IN DEVELOPMENT)



# COVID-19 DIAGNOSTICS



**Product name:**

rTEST COVID-19 qPCR SuperRapid kit

**Catalogue number:**

COV-K10

**Brief description:**

The rTEST COVID-19 qPCR SuperRapid kit is an ultra-fast (fast thermal cycling enabled by the use of proprietary reaction enhancers), qualitative in vitro diagnostic test designed to detect the presence of SARS-CoV-2 genetic material in biological samples obtained by gargling without RNA extraction.

**Detection kit:**

- Improved sensitivity of proprietary RdRP and E assays together with RNase P assay as an internal control
- SARS-CoV-2 full genomic RNA spiked with human RNA used as a positive control
- 100% clinical accuracy
- 100% specific for SARS-CoV-2
- 100% analytical sensitivity with 8 copies/rxn
- Validated on real clinical samples
- No cold chain shipping needed

Delivery:	Room temperature stable shipping and storage
Amount:	400 tests
Price:	Upon request
Registration code:	CE IVD P1430A



< 45 minutes

VALIDATED  
BY



# COVID-19 DIAGNOSTICS



**Product name:**

rTEST COVID-19 qPCR Rapid kit

**Catalogue number:**

COV-K9

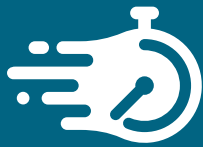
**Brief description:**

The rTEST COVID-19 qPCR Rapid kit is a qualitative in vitro diagnostic test designed to detect the presence of SARS-CoV-2 genetic material in biological samples obtained by gargling without RNA extraction.

**Detection kit:**

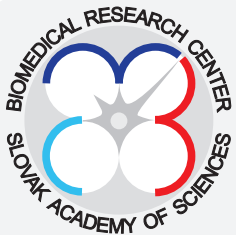
- Improved sensitivity of proprietary RdRP and E assays together with RNase P assay as an internal control
- SARS-CoV-2 full genomic RNA spiked with human RNA used as a positive control
- 100% clinical accuracy
- 100% specific for SARS-CoV-2
- 100% analytical sensitivity with 8 copies/rxn
- Validated on real clinical samples
- No cold chain shipping needed

Delivery:	Room temperature stable shipping and storage
Amount:	400 tests
Price:	Upon request
Registration code:	CE IVD P1430A



< 65 minutes

VALIDATED  
BY





# COVID-19 DIAGNOSTICS



**Product name:**

rTEST COVID-19 qPCR Allplex kit

**Catalogue number:**

COV-K4

**Brief description:**

The rTEST COVID-19 qPCR Allplex kit is an innovative, improved, and re-designed version of the WHO- recommended Charité Berlin protocol with multiplexing in a single reaction.

**Detection kit:**

- Triplex configuration: Innovative dual TaqMan® probes for RdRP, E and RNase P genes are conjugated to FAM, Yakima Yellow® and Cy5, respectively
- Innovative dual TaqMan® probes
- At least one-month room temperature stability
- Improved sensitivity of proprietary RdRP and E assays together with RNase P assay as an internal control
- SARS-CoV-2 full genomic RNA spiked with human RNA used as a positive control
- 100% clinical accuracy and specificity for SARS-CoV-2
- 100% analytical sensitivity with 2 copies/rxn
- Validated on real clinical samples
- No cold chain shipping needed

Delivery:	Room temperature stable shipping and storage
Amount:	400 tests
Price:	Upon request
Registration code:	CE IVD P1430A

3 targets  
in 1 reaction

VALIDATED  
BY





# COVID-19 DIAGNOSTICS



**Product name:**

rTEST COVID-19 qPCR Superplex kit

**Catalogue number:**

COV-K8

**Brief description:**

The rTEST COVID-19 qPCR Superplex kit is an innovative, improved and re-designed version of the WHO- recommended Charité Berlin protocol with an external spike-in control.

**Detection kit:**

- At least one-month room temperature stability
- Improved sensitivity of proprietary RdRP and E assays together with RNase P assay as an internal control or with exogenous control RNA Spike-In
- SARS-CoV-2 full genomic RNA spiked with human RNA used as a positive control
- Exogenous control RNA Spike-In (non-human and non-SARS-CoV-2) used primarily as a control to exclude false negative samples
- 100% clinical accuracy
- 100% specific for SARS-CoV-2
- 100% analytical sensitivity with 2 copies/rxn
- Validated on real clinical samples
- No cold chain shipping needed

Delivery:	Room temperature stable shipping and storage
Amount:	1000 tests
Price:	Upon request
Registration code:	CE IVD P1430A



Exogenous  
control

VALIDATED  
BY



# COVID-19 DIAGNOSTICS



**Product name:**

rTEST COVID-19/FLU qPCR kit

**Catalogue number:**

COV-K5

**Brief description:**

The rTEST COVID-19/Flu qPCR kit is a dual-pathogen, multiplexed kit capable of detecting SARS-CoV-2 and both main strains of influenza (IAV and IBV).

**Detection kit:**

- Innovative dual TaqMan® probes
- At least one-month room temperature stability
- Improved sensitivity of proprietary RdRP, E, IAV and IBV assays
- Configured as set of two triplex reactions (E/IAV/RNase P and RdRP/IBV/RNase P) using FAM, Yakima Yellow® and Cy5 channels
- Together with RNase P assay as an internal control
- SARS-CoV-2, IAV and IBV full genomic RNA spiked with human RNA used as a positive control
- 100% clinical accuracy
- 100% specific for SARS-CoV-2, and WHO predicted strains of IAV and IBV
- 100% analytical sensitivity with 4 copies/rxn for all targets
- Validated on real clinical samples
- No cold chain shipping needed

Delivery:	Room temperature stable shipping and storage
Amount:	400 reactions
Price:	Upon request
Registration code:	CE IVD P1751A

Checked  
against WHO  
anticipated  
influenza  
strains

VALIDATED  
BY





# COVID-19 DIAGNOSTICS



**Product name:**

Vivid COVID-19 LAMP Direct-G kit

**Catalogue number:**

COV-L1

**Brief description:**

The Vivid COVID-19 LAMP Direct-G diagnostic kit is designed to detect SARS-CoV-2 viral RNA in gargle samples without an RNA extraction step.

**Detection kit:**

- Accepts minimally processed gargle samples as input
- Patent pending colorimetric detection system – Vivid colors but pH independent
- Together with RNase P assay as an internal control
- Proprietary quadruplexed SARS-CoV-2 LAMP assay has limit of detection of 8 copies/rxn – as sensitive as most RT-qPCR tests!
- 100% diagnostic specificity and sensitivity for clinical gargle samples with Ct < 34 as determined by RT-qPCR

Delivery:	-20 °C
Amount:	200 tests
Price:	Upon request
Registration code:	CE IVD 2138A



Enhanced  
sensitivity

VALIDATED  
BY





# Mobile COVID-19 Infrastructure solutions

## Product name:

Mobile COVID-19 testing infrastructure solutions

## Catalogue number:

MTS1

## Brief description:

- Easy and fast set up
- Suitable for large organizations and for difficult remote areas lacking in RT-PCR testing facilities
- Developed in cooperation with partner experienced in mobile health care solutions and humanitarian crisis management
- Suitable for all-weather conditions
- Equipped with own and proprietary NAAT LAMP SARS-CoV-2 tests
- CE IVD certified
- Possible adaptation for other diseases and pathogens

## LAMP LAB COMPACT:

Manually operated mobile testing laboratory unit  
On wheel/No wheel – 20 ft

Capable of performing

**< 1000** COVID-19 tests a day

## PACKAGE INCLUDES:

- LAMP diagnostic kits
- Gargle sample collection kits
- Training of lab personnel
- Quick reference cards
- Basic LAMP lab equipment

## LAMP LAB MAX:

Automated mobile testing laboratory unit  
On wheel/No wheel – 40 ft

Capable of performing

**> 1000** COVID-19 tests a day

## PACKAGE INCLUDES:

- LAMP diagnostic kits
- Gargle sample collection kits
- Training of lab personnel
- Quick reference cards
- Lab equipment with automatic 96 channel electronic pipette

## OPTIONAL:

Automated results and patient management system



# COVID-19 DIAGNOSTICS



**Product name:**

rTEST COVID-19 qPCR Multiplex kit

**Catalogue number:**

COV-K3

**Brief description:**

The rTEST COVID-19 qPCR Multiplex kit is an improved, duplexed version of the WHO-recommended Charité Berlin protocol.

**Detection kit:**

- Duplex configuration: Innovative dual TaqMan® probes for E and RdRP gene are conjugated to FAM and the TaqMan® probe for RNase P transcript is conjugated to Yakima Yellow®
- At least one-month room temperature stability
- Improved sensitivity of RdRP and E assays multiplexed with RNase P assay as an internal control
- SARS-CoV-2 full genomic RNA spiked with human RNA used as a positive control
- 100% clinical accuracy and specificity for SARS-CoV-2
- 100% analytical sensitivity with 2 RNA copies/rxn
- Validated on real clinical samples
- No cold chain shipping needed

Delivery:	Room temperature stable shipping and storage
Amount:	400 tests
Price:	Upon request
Registration code:	CE IVD P1430A





# COVID-19 DIAGNOSTICS



**Product name:**

rTEST COVID-19 qPCR Multivariant kit

**Catalogue number:**

COV-K7

**Brief description:**

rTEST COVID-19 qPCR Multivariant kit is a qualitative in vitro confirmatory test designed to detect the presence of SARS-CoV-2 genetic material in biological samples obtained primarily from the human upper airways (nose and nasopharynx). This kit allows the differentiation of multiple SARS-CoV-2 variants based on the presence or absence of 9-base pair deletion in NSP6 that is translated from Orf1 (NSP6 S106-F108del; del9) and 6-base pair deletion in the Spike protein (S H69/V70del; del6).

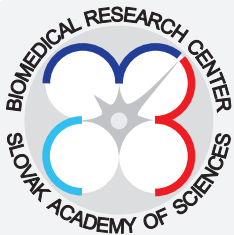
**Detection kit:**

- Differential test distinguishing between multiple SARS-CoV-2 lineages including a novel SARS-CoV-2 variants
- Innovative dual TaqMan® probes
- Multiplexed version together with RNase P assay as an internal control
- SARS-CoV-2 B.1.1.7 full genomic RNA spiked with human RNA used as a positive control
- 100% clinical accuracy for all tested markers
- 100% analytical sensitivity with 2 copies/rxn for all targets (SARS-CoV-2 E and RdRP gene, del9 and del6)
- Validated on real clinical samples of SARS-CoV-2 **lineages B.1.1.7, B.1.351, B.1.258 confirmed by sequencing**
- At least one-month room temperature stability
- No cold chain shipping needed

Delivery:	Room temperature stable shipping and storage
Amount:	200 tests
Price:	Upon request
Registration code:	<b>RUO</b>

Distinguishes  
between  
multiple  
lineages

VALIDATED  
BY





# COVID-19 DIAGNOSTICS



**Product name:**

rTEST COVID-19 qPCR B.1.1.7 kit

**Catalogue number:**

COV-K6

**Brief description:**

Room temperature stable multiplexed kit for a specific detection for B.1.1.7, a variant strain of SARS-CoV-2 from the United Kingdom

**Detection kit:**

- Duplex configuration: Innovative dual TaqMan® probes for consensus (C95) and B.1.1.7 Spike (S) protein gene are conjugated to FAM and the TaqMan® probe for RNase P transcript is conjugated to Cy5.
- At least one-month room temperature stability
- Improved sensitivity of C95 and B.1.1.7 assays multiplexed with RNase P assay as an internal control
- SARS-CoV-2 B.1.1.7 full genomic RNA spiked with human RNA used as a positive control
- 100% clinical accuracy and specificity for both the consensus SARS-CoV-2 and B.1.1.7 variant
- 100% analytical sensitivity with 2 copies/rxn for consensus and 10 copies/rxn for B.1.1.7
- Validated on real lineage B.1.1.7 clinical samples confirmed by sequencing
- No cold chain shipping needed

Delivery:	Room temperature stable shipping and storage
Amount:	200 tests
Price:	Upon request
Registration code:	CE IVD P2058A

Specific  
detection of  
B.1.1.7

VALIDATED  
BY



# COVID-19 DIAGNOSTICS



**Product name:**

rTEST COVID-19 qPCR kit

**Catalogue number:**

COV-K2

**Brief description:**

Room temperature stable SARS-CoV-2 detection kit in a single-channel configuration.

**Detection kit:**

- Single-channel configuration: Innovative dual TaqMan® probes for E gene, RdRP gene and RNase P transcript are conjugated to FAM
- At least one-month room temperature stability
- Improved sensitivity of proprietary RdRP and E assays together with RNase P assay as an internal control
- SARS-CoV-2 full genomic RNA spiked with human RNA used as a positive control
- 100% clinical accuracy and specificity for SARS-CoV-2
- 100% analytical sensitivity with 2 RNA copies/rxn
- Validated on real clinical samples
- No cold chain shipping needed

Delivery:	Room temperature stable shipping and storage
Amount:	400 tests
Price:	Upon request
Registration code:	CE IVD P1430A





# COVID-19 DIAGNOSTICS

**Product name:**

Coronavirus qPCR probes and primers

**Catalogue number:**

COV-PP1

**Brief description:**

Primer and Probe Sets from National Institute  
For Viral Disease Control and Prevention / China

Primer and Probe Sets from Centers for Disease Control  
and Prevention / CDC, USA

Specific Research Use Only (RUO) primers and probes for detection  
of severe acute respiratory syndrome coronavirus 2 - SARS-CoV-2  
(previously known as “2019 novel coronavirus”) causing coronavirus  
disease (COVID-19).

- 1) We will synthesize custom primers and probes of your choice
- 2) We will offer design of the most specific primers and TaqMan® probes

Delivery:	Room temperature stable shipping and storage, lyophilized	
Amount:	For 500 rxn kit, we offer 10 nmol of reverse and forward primer and 2.5 nmol of TaqMan® probe.	
Price:	MDX SARS-CoV-2 RUO Kit, 100 rxn:	€49,00
	MDX SARS-CoV-2 RUO Kit, 500 rxn:	€98,00
	MDX SARS-CoV-2 4xTarget Kit, 500 rxn:	€380,00





# OTHER INFECTIOUS DISEASES DIAGNOSTICS

**Product name:**

Chlamydia antigens for diagnosis of Chlamydia infections

**Catalogue number:**

	CFT	ELISA
Chlamydia antigens		
	B2CF	B2EL
Control sera		
Positive	2PRSCF	2PRSEL
Negative	2NRSCF	2NRSEL

**Brief description:**

**ELISA/CFT**

The antigens are used for the detection of antibodies against Chlamydia\* in the blood serum samples of humans and animals by the enzyme-linked immunosorbent assay (ELISA) or the complement fixation test (CFT). It is useful for serological screening and surveillance.

**Positive and Negative rabbit sera**

Positive rabbit sera (PRS) containing specific antibodies against Chlamydia\*, can be used as positive controls.

Negative rabbit sera (NRS) without specific antibodies against Chlamydia can be used as negative controls.

\* *Chlamydophila abortus*, *Chlamydophila psittaci* and *Chlamydia trachomatis* are used according to the customer's request.

Delivery:	Cold or refrigerated shipments (2°C to 8°C)
Amount:	From 1 ml
Price:	Upon request (volume discounts available)
Registration code:	<b>RUO</b>



# OTHER INFECTIOUS DISEASES DIAGNOSTICS

**Product name:**

Coxiella burnetii antigens for diagnosis of Q fever

**Catalogue number:**

	MAR	CFT	ELISA		IFA
Coxiella burnetii antigens					
Phase 1	B1MA2	B1CF2	B1EL2	B1EL3	B1F2
Phase 2	B1MA1	B1CF1	B1EL1		B1F1
Control sera					
Positive	1PRSMA	1PRSCF	1PRSEL		1PRSIF
Negative	1NRSMA	1NRSCF	1NRSEL		1NRSIF

**Brief description:**

The antigens are used for the detection of antibodies against *Coxiella burnetii* in the blood serum samples of humans and animals by different techniques depending on the customer's preference and include: the microagglutination reaction (MAR), the complement fixation test (CFT) the enzyme-linked immunosorbent assay (ELISA) and the indirect immunofluorescent assay (IFA).

1. Coxiella burnetii
- 1.1. Phase 1 antigens

MAR/CFT/ELISA/IFA

The antigens are especially applied for the detection of elevated levels of *Coxiella burnetii* phase I antibodies and thus, useful for both confirmation and therapeutic follow-up of the chronic Q fever in humans.

2. Coxiella burnetii
- 2.1. Phase 2 antigens

MAR/CFT/ELISA/IFA

The antigens are especially applied for the detection of elevated levels of *Coxiella burnetii* antibodies about 10 days after infection and thus, are useful for the diagnosis of acute Q fever in endemic areas.

Delivery:	Cold or refrigerated shipments (2°C to 8°C)
Amount:	From 1 ml
Price:	Upon request (volume discounts available)
Registration code:	<div>RUO</div>





# CUSTOM OLIGONUCLEOTIDES

**Product name:**

Oligonucleotide synthesis on demand

**Catalogue number:**

cOligo

**Brief description:**

We provide synthesis of: aptamers, siRNA, miRNA, antagomirs, qPCR probes, oligonucleotide triphosphates, barcoded pre-adenylated 3'-adapters, multilabel in situ hybridization probes

**Length:**

up to 120 nt

**Available backbones:**

DNA, RNA, LNA, 2'-OMe, 2'-F, phosphorothioate, DNA/RNA hybrids/chimeras, etc.  
Wide choice of modifiers, fluorescent labels, quenchers, etc.  
PAGE purification for outstanding sample purity

Delivery:	Lyophilized, in tubes
Amount:	Synthesis scale: from 5 nmol up to 1 µmol
Price:	Upon request; 15% off your first order
Special request:	Please contact us at <a href="mailto:orders@multiplexdx.com">orders@multiplexdx.com</a>





## Pricing (excl. shipping & taxes)

## CUSTOM OLIGONUCLEOTIDES

**DNA: Single tube, shipped dry**

DNA length						
Synthesis Scale [μmol]	<30 nt	30-59 nt	60-100 nt	<30 nt	30-59 nt	60-100 nt
	Price (EUR/base)			Price [EUR/base] (PAGE/HPLC purified)		
0.2	0.3	0.3	0.6	1.0	1.0	1.5
0.5	0.6	0.6	0.8	1.2	1.2	1.7
1.0	0.8	0.8	1.0	1.4	1.4	1.9

Modification (supplement to unmodified oligo price)									
Synthesis Scale [μmol]	RNA	LNA	2'F	2'OMe	PTO	Aba- sic site	Ami- no 5' / 3'	Ami- no Int.	Biotin 5' / 3'
	Price (EUR/unit in the sequence)								
0.2	8	60	40	14	5	120	80	100	75
0.5	12	85	60	18	9	180	130	150	110
1.0	14	110	80	30	14	225	180	225	180

Modification (supplement to unmodified oligo price)									
Synthesis Scale [μmol]	Biotin Int.	Thiol 5' / 3'	Thiol Int.	Phosphate 5' / 3'	Tri-phosphate 5'	Spacer C2-C18	BHQ-1	BHQ-2	BHQ-3
	Price (EUR/unit in the sequence)								
0.2	65	120	140	55	125	65	110	110	140
0.5	90	175	190	65	175	90	175	175	190
1.0	150	250	275	75	275	130	250	250	280

**Duplex preparation:** extra 30 EUR

**ESI QC:** extra 30 EUR

**HPLC QC:** extra 30 EUR

RNA: Single tube, shipped dry

RNA length						
Synthesis Scale [μmol]	<30 nt	30-59 nt	60-100 nt	<30 nt	30-59 nt	60-100 nt
	Price (EUR/base)			Price [EUR/base] (PAGE/HPLC purified)		
0.2	7.0	8.0	12.0	9.0	10.0	15.0
0.5	10.0	12.5	15.0	12.0	15.0	18.0
1.0	12.5	15.0	20.0	15.0	18.0	25.0

Modification (supplement to unmodified oligo price)									
Synthesis Scale [μmol]	Biotin Int.	Thiol 5' / 3'	Thiol Int.	Phos- phate 5' / 3'	Tri- phos- phate 5'	Spa- cer C2- C18	BHQ-1	BHQ-2	BHQ-3
	Price (EUR/unit in the sequence)								
0.2	65	120	140	55	125	65	110	110	140
0.5	90	175	190	65	175	90	175	175	190
1.0	150	250	275	75	275	130	250	250	280

Modification (supplement to unmodified oligo price)									
Synthesis Scale [μmol]	6-FAM 5'	Hex 5'	Cy3 5'	Cy5 5'	Yaki-ma Yellow 5'	ddC 3'	Amino serinol 5'	Amino serinol 3'	Alky-ne 5'
	Price (EUR/unit in the sequence)								
0.2	8	60	40	14	5	120	80	100	110
0.5	12	85	60	18	9	180	130	150	175
1.0	14	110	80	30	14	225	180	225	255

# RNA SEQUENCING

**Product name:**

Barcoded pre-adenylated 3'-adapters

**Catalogue number:**

ADAPT

**Brief description:**

- Illumina or SOLiD sequencing compatible
- Barcoding enables massive multiplexing for economical high-throughput RNA sequencing and profiling
- Ideal for adding a linker to any RNA
- We offer versatility by modifying kit to your sequencing requirements as well as altering adapters to your needs - length, barcode, sequence, linker, Illumina compatibility, etc.
- We guarantee 100% purity by DPAGE purification and one week turnaround time

Delivery:	Room temperature stable shipping
Amount:	10 nmol final yield = 100 ligations (each adapter)
Price:	€795 per adapter or following prices from the table below:

10 nmol price	
Number of adapters	€ per adapter
1-5	795
6-10	750
11-15	720
16-20	695
21-30	670
31-50	650
51-	625





# RNA SEQUENCING

**Product name:**

Fluorescently labelled pre-adenylated 3' adapters

**Catalogue number:**

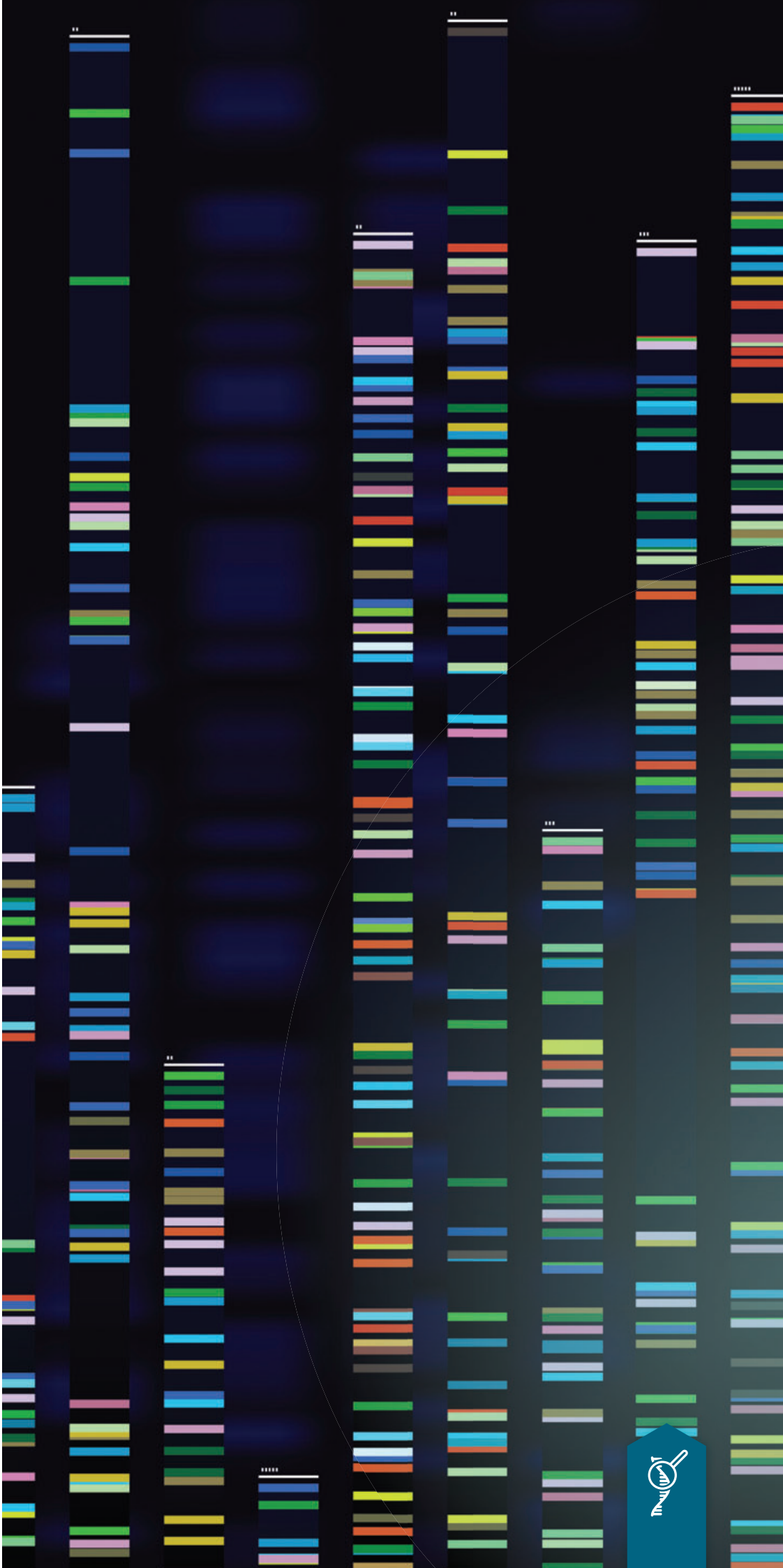
ADAPT2

**Brief description:**

- Ideal for all CLIP (Immunoprecipitation) protocols
- Eliminate the need to use radioactivity
- Experimentation time reduced by half
- Sensitivity increased 10–100-fold

**Reference:** Anastasakis et al.; Nucleic Acids Research, 2021, Vol. 49, No. 8 e45, doi: 10.1093/nar/gkab011

Delivery:	Room temperature stable shipping
Amount:	10 nmol final yield = 100 ligations (each adapter)
Price:	Upon request



# RNA FISH

**Product name:**

FullRNAlook

**Catalogue number:**

fRNA-1

**Brief description:**

- **OPERATIONAL SIMPLICITY:** Entire protocol runs at **ROOM TEMPERATURE** – no need for special equipment
- **COMPATIBILITY:** Compatible with RNA FISH protocols from ACD, Stellaris, Affymetrix, Ventana, PerkinElmer, Exiqon as well as all automated tissue processors (Ventana, Biogenex)
- **HIGH SUCCESS RATE:** Compared to current standard RNA FISH protocols our FullRNAlook is simple, fast and highly reliable and reproducible.
- **VERSATILITY:** Kit can be customized, to include one’s chosen fluorescent labels on hybridization probes.

**Amount:**

- Hybridization buffer – 7 ml
- 10x Wash buffer 1 – 2x 80 ml
- 20x Wash buffer 2 – 60 ml
- 20x Wash buffer 3 – 3x 90 ml
- 28S rRNA-ATTO-488 probe
- polyT-ATTO-550 probe
- DAPI
- Mounting solution – 1.5 ml
- 5 slides with the paraffin-embedded cell pellet of BT474

**Price/order:**

Upon request

Fluorescence images of the BT474 cell line:



Simplest and the most robust RNA FISH on the market



Great for RNA integrity and RNA FISH specificity assessment





# NEXT GENERATION SEQUENCING & BIOINFORMATICS

**Product name:**

Sequencing & Bioinformatics

**Catalogue number:**

SEQ/BIONF

**Brief description:**

We offer a wide range of bioinformatics services including:

- Preparation of RNA seq libraries (miRNA, mRNA, non-coding RNA)
- Illumina and Oxford Nanopore sequencing
- De novo genome (including plants) assembly and annotation (input: RNA-seq, DNA-seq)
- Differential gene expression analysis (input: RNA-seq, small RNA-seq) and the downstream network analysis
- Corrections for batch effects, data quality analysis, phylogenetics, predictions of protein-protein interactions, set up of high-quality orthogroups
- And many more

Price:	Upon request
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# Multiplex 8+

## BREAST CANCER DIAGNOSTICS (IN DEVELOPMENT)

### BRIEF DESCRIPTION:

Breast cancer is the most common cancer in women worldwide, but current diagnostic tests lack precision, often leading to misdiagnosis and inaccurate treatment. The EU EIC Accelerator funded Multiplex8+ project's goal is to develop a personalized and precise diagnostic test for early and late-stage breast cancer.

The test combines two patented multiplexed cancer diagnostic technologies: visualization (RNA FISH) and RNA sequencing. MultiplexDX's IP-based and innovative platform merges histopathology methods, biomarker quantification, visualization, and gene expression with a single-cell resolution by combining our proprietary visual and sequencing technologies into one diagnostic test.

Physicians and patients will receive a clear, concise, and explainable report containing the following:

- Information about the spatial mRNA expression of the four clinical breast cancer biomarkers (Estrogen/Progesterone/Her2 receptors and Ki-67)
  - Cross validated using two independent techniques: RNA FISH and RNA-seq
- Molecular subtype of breast cancer based on spatially resolved, tumor-enriched LCM-seq
- A risk score that provides the physician with a guide for tailored treatment

### STATE OF DEVELOPMENT:

**2022:** End of retrospective clinical validation

**2023:** Start of prospective clinical validation

For current developments and more information, follow us @multiplexdx on all platforms.





**multiplexDX.com**



If not otherwise stated, for Research Use Only.  
Not for use in diagnostic procedures  
(Does not apply for registered COVID-19 tests).

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© MultiplexDX, s. r. o.  
Published in the Slovak Republic  
January, 2023