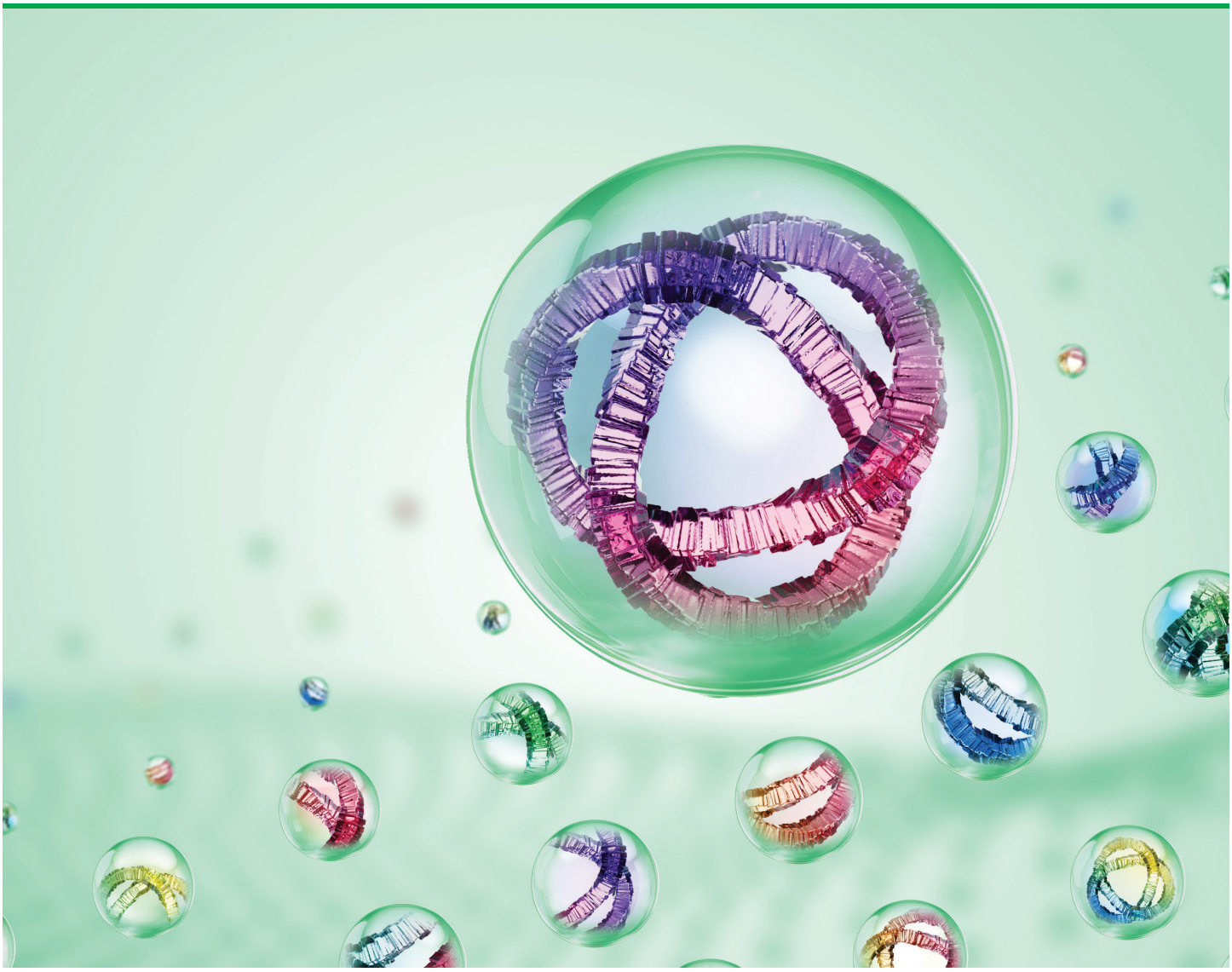
ddPLEX CrystalTag ddPCR Assays and QX700™ CrystalTag Reporters

More Multiplexing. More Answers.

CrystalTag technology brings the power of multiplex Droplet Digital™ PCR (ddPCR™) solutions into a workflow that's simple to design, flexible to adapt, and built to support your research.



ddPLEX CrystalTag ddPCR Assays, QX700 CrystalTag Reporters, and QX700 ddPCR Systems are for Research Use Only. Not for use in diagnostic procedures.

Visit **www.bio-rad.com/ddplex-crystaltag-ddpcr-assays** for more information.

Flexible Multiplexing Starts Here

ddPLEX CrystalTag ddPCR Assays use CrystalTag technology, a two-component detection system of CrystalTag Probes and CrystalTag Reporters that expands multiplexing capabilities to deliver more information from a single reaction. Each assay includes CrystalTag Probes and primers in a single tube, regardless of multiplex level, along with a synthetic DNA positive control to streamline analysis. CrystalTag Reporters are sold separately and can be used with all ddPLEX CrystalTag ddPCR Assays.

Designed to Work Together



CrystalTag Probes

Target-specific detection.

CrystalTag Probes are nonfluorescent, target-specific probes that activate CrystalTag Reporters during PCR. They contain a non-target specific sequence, a tag oligo. When released during PCR, they trigger the fluorescence of their complementary CrystalTag Reporter. Together, they deliver the specificity needed for multiplex ddPCR technology while simplifying assay design.

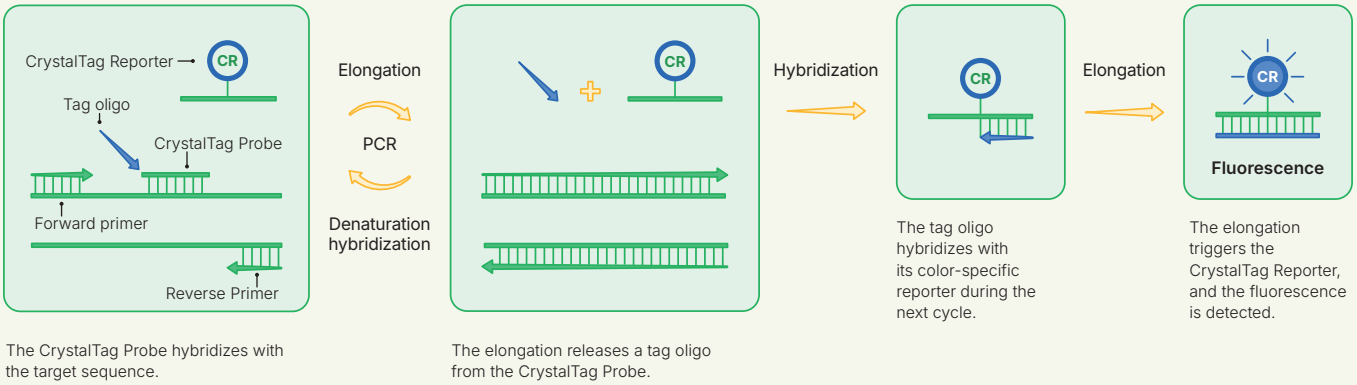


CrystalTag Reporters

One reporter set. Multiple assays.

CrystalTag Reporters are non-target specific oligonucleotides that emit fluorescent signals only when triggered during the ddPCR reaction by their specific tag oligo. They work with all ddPLEX CrystalTag ddPCR Assays, making it easier to create multiplex panels while reducing the need for assay-specific fluorescent probes.

How CrystalTag Chemistry Works



Build Assays for a Wide Range of Applications

CrystalTag's nonfluorescent probe architecture separates target detection from signal generation, so the same reporters work whether you are studying oncology variants, investigating pathogen targets, or monitoring environmental targets. Use CrystalTag technology to develop your customized, multiplex ddPCR assays.



Oncology research



Infectious disease research



Cell and gene therapy research



Food safety testing



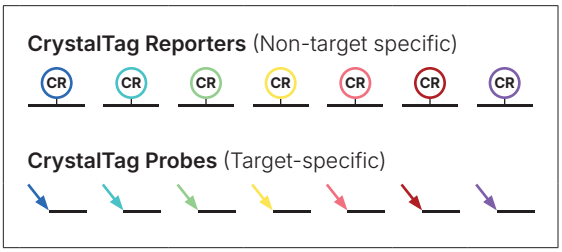
Environmental testing

© 2026 Bio-Rad Laboratories, Inc.

Detect Up to 21 Targets with the QX700™ ddPCR System

CrystalTag Technology makes the most of your seven fluorescent channels to detect up to 21 targets in a single reaction with color-combination mutiplexing.

For each of the seven channels of the QX700 ddPCR System, there is one specific CrystalTag Reporter. The reporters are combined in one tube, maximizing multiplexing capacity in single reaction.





Detect More Targets Using a Color-Combination Approach

Traditional multiplexing assigns one fluorescence channel to one target, allowing detection of up to seven targets. By combining two reporter colors, CrystalTag chemistry expands multiplexing to detect up to 21 targets in a single reaction on the QX700 ddPCR system.

Standard Approach

Target	FAM	HEX	ROX	ATTO 590	Cy5	Cy5.5	ATTO 550
1	✔						
2		✔					
3			✔				
4				✔			
5					✔		
6						✔	
7							✔

Conventional 1-color/1-target approach = 7-plex

Even with 21 targets in a single reaction, analysis stays simple: a 1D threshold per color channel, thanks to predefined analysis configuration files with populations already mapped to each target and included with every ddPLEX CrystalTag ddPCR Assay.

Color-Combination Approach

Target	FAM	HEX	ROX	ATTO 590	Cy5	Cy5.5	ATTO 550
1	✔	✔					
2	✔		✔				
3	✔			✔			
4	✔				✔		
5	✔					✔	
6	✔						✔
7		✔	✔				
8		✔		✔			
9		✔			✔		
10		✔				✔	
11		✔					✔
12			✔	✔			
13			✔		✔		
14			✔			✔	
15			✔				✔
16				✔	✔		
17				✔		✔	
18				✔			✔
19					✔	✔	
20					✔		✔
21						✔	✔

Color-combination approach = 21-plex

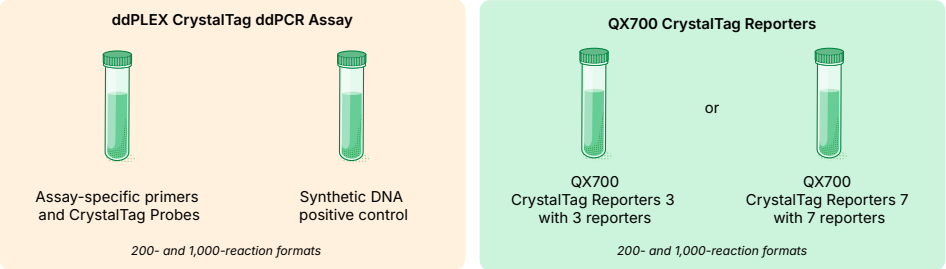
© 2026 Bio-Rad Laboratories, Inc.

A Portfolio Built for Your Research

From oncology research to environmental testing, ddPLEX CrystalTag ddPCR Assays help researchers detect and quantify up to 21 targets in a single reaction across a wide range of applications. Choose from ready-to-use assays or develop custom solutions tailored to your research.

Everything You Need for Your Multiplex Workflow

CrystalTag workflow components are available in multiple formats, allowing you to purchase only what you need while maintaining flexibility across projects.



What Can CrystalTag Technology Help You Do?

Build Assays Your Way

Use CrystalTag Reporters with target-specific CrystalTag Probes to detect virtually any target, giving you the flexibility to design assays that fit your research.

Simplify Multiplex Analysis

AI-powered software automatically assigns color combinations to targets, helping reduce the complexity of multiplex assay design and analysis.

Create Flexible, Custom Assay Configurations

Adapt and design target-specific CrystalTag Probes through our Custom CrystalTag Assay Design Service while maintaining a consistent reporter set.

Detect Up to 21 Targets in a Single Chamber

Mix fluorescent colors to detect up to 21 targets in one chamber using as little as 5 µL of sample.

Get Started With Our ddPLEX CrystalTag ddPCR Assays

Interested in learning more? Connect with a Bio-Rad ddPCR specialist to explore how CrystalTag technology can support your multiplex assay development needs.

Ordering Information

Catalog #	Description
	ddPLEX CrystalTag ddPCR Assay See catalog for the full list of assays.
12027210	QX700 CrystalTag Reporters 3, 200R
12027271	QX700 CrystalTag Reporters 3, 1,000R
12027244	QX700 CrystalTag Reporters 7, 200R
12027265	QX700 CrystalTag Reporters 7, 1,000R

Visit **www.bio-rad.com/ddplex-crystaltag-ddpcr-assays** to see ddPLEX CrystalTag ddPCR Assays available for your QX700 ddPCR system.

ddPLEX CrystalTag ddPCR Assays, QX700 CrystalTag Reporters, and QX700 ddPCR Systems are for Research Use Only. Not for use in diagnostic procedures.

Bio-Rad, Droplet Digital PCR, ddPCR, and QX700 are trademarks of Bio-Rad Laboratories, Inc. All trademarks used herein are the property of their respective owner.

© 2026 Bio-Rad Laboratories, Inc.

Bio-Rad Laboratories, Inc.

Life Science Group

Website bio-rad.com **USA** 1 800 424 6723 **Australia** 61 2 9914 2800 **Austria** 00 800 00 24 67 23 **Belgium** 00 800 00 24 67 23 **Brazil** 55 11 3065 7550 **Canada** 1 800 361 1808 **China** 86 21 6169 8500 **Czech Republic** 00 800 00 24 67 23 **Denmark** 00 800 00 24 67 23 **Finland** 00 800 00 24 67 23 **France** 00 800 00 24 67 23 **Germany** 00 800 00 24 67 23 **Greece** 30 210 7774396 **Hong Kong** 852 2789 3300 **Hungary** 00 800 00 24 67 23 **India** 91 124 4029300 **Israel** 000 800 00 24 67 23 **Italy** 00 800 00 24 67 23 **Japan** 81 3 6361 7000 **Korea** 82 080 007 7373 **Luxembourg** 00 800 00 24 67 23 **Mexico** 52 55 5488 7670 **The Netherlands** 00 800 00 24 67 23 **New Zealand** 64 9 415 2280 **Norway** 00 800 00 24 67 23 **Poland** 00 800 00 24 67 23 **Portugal** 00 800 00 24 67 23 **Russian Federation** 7 495 721 14 04 **Singapore** 65 6415-3170 **South Africa** 27 21 531 7504 **Spain** 00 800 00 24 67 23 **Sweden** 00 800 00 24 67 23 **Switzerland** 00 800 00 24 67 23 **Taiwan** 886 2 2578 7189 **Thailand** 662 651 8311 **United Arab Emirates** 971 4 818 7300 **United Kingdom** 00 800 00 24 67 23