TaqPath™ 1-Step Multiplex Master Mix

Catalog Numbers A28521 (1 × 0.5 mL), A28522 (5 × 1 mL), A28523 (1 × 10 mL), A28525 (1 × 0.5 mL), A28526 (5 × 1 mL), A28527 (1 × 10 mL)

Doc. Part No. 100033995 **Pub. No.** MAN0014069 **Rev.** B.0

Note: For safety and biohazard guidelines, see the "Safety" appendix in the *TaqPath™ 1-Step Multiplex Master Mix User Guide* User Guide (Pub. No. MAN0014269). Read the Safety Data Sheets (SDSs) and follow the handling instructions. Wear appropriate protective eyewear, clothing, and gloves.

Product description

The TaqPath™ 1-Step Multiplex Master Mix is used to perform one-step multiplex real-time PCR applications with any gene-specific primer and probe sets, and is suitable for both RNA and DNA targets.

Isolate and purify the target nucleic acid samples according to your laboratory practices. For sample preparation recommendations, see the *TaqPath™ 1-Step Multiplex Master Mix User Guide* (Pub. No. MAN0014269).

Contents and storage

Product	Cat. No.	Storage
TaqPath™ 1-Step Multiplex Master Mix (No ROX™)	A28521 A28522 A28523	–30°C to –10°C
TaqPath™ 1-Step Multiplex Master Mix	A28525 A28526 A28527	

Prepare a reaction mix for real-time PCR systems

1. Thaw all reagents on ice.
2. Calculate the total volume required for each reaction based on the following table.

Component	Fast systems (20-µL rxn)	Standard systems (50-µL rxn)	Notes
TaqPath™ 1-Step Multiplex Master Mix (4X)	5 µL	12.5 µL	—
Up to four user-defined assays (primers and probe)	1 µL/assay	2.5 µL/assay	Use primer concentrations of 150–900 nM and a probe concentration of 100–250 nM.
Sample	Variable	Variable	Use as much sample as needed, but do not exceed the total reaction volume.
RT-qPCR Grade Water	Variable	Variable	Fill to the total reaction volume.
Total volume per reaction	**20 µL**	**50 µL**	**—**

IMPORTANT! The TaqPath™ 1-Step Multiplex Master Mix is a 4X formulation and is more viscous than most master mixes. Ensure that all components are thoroughly mixed in all the wells before proceeding. It has been observed that inverting the plate gives more uniform mixing across the reaction plate than vortexing.

RT-real-time PCR thermal cycling conditions

Step	Stage	Cycles	Temperature	Time (Fast systems)	Time (Standard systems)
UNG incubation	1	1	25°C	2 minutes	2 minutes
Reverse transcription	2	1	53°C	10 minutes	10 minutes
Polymerase activation	3	1	95°C	2 minutes	2 minutes
Amplification	4	40	95°C	3 seconds	15 seconds
			60°C	30 seconds	1 minute

Note: During thermal cycling, the reverse transcription step will not affect performance with DNA targets.

Life Technologies Corporation | 7335 Executive Way | Frederick, MD 21704 | USA

For descriptions of symbols on product labels or product documents, go to **thermofisher.com/symbols-definition**.