

Imagen® Fast TaqMan qPCR Premix

Cat. No

Description

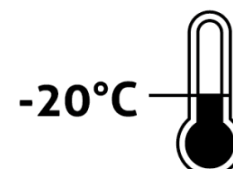
Imagen® Fast TaqMan qPCR Premix is a ready-to-use, 2X concentrated premix including a novel Hotstart Taq DNA polymerase, optimized reaction buffer and nucleotides with Rox reference dye and combines accurate using sequence-specific fluorogenic probe chemistries including hydrolysis probes (ex. TaqMan, Molecular beacon, etc...) which provides good specificity and amplification efficiency for real-time PCR.

Contents

The **Imagen® Fast TaqMan qPCR Premix** is supplied as a ready-to-use 2x reaction mix. The formulation contains, Fast Hotstart Taq DNA polymerase, dNTPs, MgCl₂, reaction enhancers, and stabilizers.

Storage

- ✓ -20 °C
- ✓ Protected from light
- ✓ Avoid repeated freezing and throwing



Reaction Mix Thawing and Handling

Imagen® Fast TaqMan qPCR Premix is delivered in a 2x ready-to-use format. To use the mix, thaw the vial on ice to 4 °C.

Please completely mix the vial and briefly centrifuge to ensure all components are at the bottom of the tube. Store on ice protected from light until ready to use. If using automated liquid handling, let sit at ambient temperature for 10 min to further reduce the viscosity.

Application

- ✓ Quantitative real-time PCR
- ✓ Quantitative 2-step RT-PCR
- ✓ Gene expression analysis
- ✓ Low copy gene detection

Prepare the qPCR Reaction Mix

1. Mix the **Imagen® Fast TaqMan qPCR Premix** thoroughly but gently until it's completely homogenous.
2. Prepare the qPCR Reaction Mix for the number of reactions required as shown in table below and plus 10% overage.
4. Add DNA (and nuclease-free water, if needed) to the PCR tubes or wells containing the reaction mix, seal tubes or wells with flat caps or optically transparent film, and gently vortex to ensure thorough mixing of the reaction components.
5. Program the thermal cycling protocol on the real-time PCR instrument.

Reagent	Volume (ul)	Final conc.
Imagen® Fast TaqMan qPCR Premix	12.5	1x
Forward Primer(10 uM)	0.75	300 - 600 nM
Reverse Primer(10 uM)	0.75	300 - 600 nM
Fluorogenic Probe(10 uM)	0.5	200-400 nM
DNA Template	2	100 ng - 10 pg
Nuclease-free water	8.5	-
Final volume	25	-

3. Vortex the tube to mix the contents thoroughly, then centrifuge briefly to collect the contents at the bottom of the tube. (*Use good pipetting practice to ensure assay precision and accuracy of dispensing.)
6. Load the PCR tubes or plates onto the real-time PCR instrument and start the qPCR run program.
7. When thermal cycling is complete, perform data according to the instructions in the instrument-specific software.

Step		Temp. °C	Time	Cycles
DNA polymerase activation and template denaturation Amplification		95°C	1 min	1
Amplification	Template denaturation	95°C	3 sec	35-40
	Annealing / Extension and plate read	58 - 65°C	≥ 10 sec © Data acquisition	