

PRODUCTS

PRODUCT	SIZE	SKU
2X ProPlant SYBR Mix	2 ml	PCCSKU1101
	5 ml	PCCSKU1102

DESCRIPTION

2X ProPlant SYBR Mix is a convenient 2X qPCR Mastermix for SYBR® Green-based detection. If your device requires normalization, a universal concentration of ROX™ compatible with all common thermocycling devices (including Bio-Rad devices) is included. An additional HotStart feature grants maximum control over the reaction start and the included dUTP blend allows for pre-PCR UNG digestion if cross-contamination is an issue. The combination of all these features makes 2X ProPlant SYBR Mix an easy-to-use, all-round talent for difficult qPCR applications as well as for regular applications.

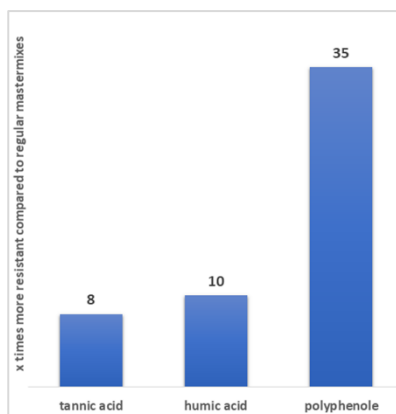


Fig. 1 2X ProPlant SYBR Mix vs. common plant PCR inhibitors

It is optimized for the use with plant-derived samples and shows increased resistance against PCR inhibiting agents.

ADDITIONAL MATERIALS REQUIRED

- Nuclease free PCR tubes or plates
- Real-time PCR cycler
- PCR Primer
- Template DNA and control DNA standards
- Filter pipette tips
- Sterile, nuclease-free, DNA-free tubes for preparing the reaction mix

STORAGE

Store all components at -20°C and avoid repeated freeze and thaw cycles.

BEFORE USE

Thaw the 2X mastermix to room temperature and mix thoroughly before use.

TEMPLATE

The amount of template is dependent on the type and quality of the DNA used.

When using genomic DNA as template, up to 200 ng can be used, for plasmid DNA, the amount of template DNA should not exceed 10 ng. In general, the volume of template DNA should not exceed 10% of the reaction volume (e.g. 2 µl in a 20 µl reaction). If genes with a high copy number are expected, we recommend a dilution series of the template to increase accuracy of your results.

PCR REACTION SETUP

Before starting the reaction setup, thaw 2X ProPlant SYBR Mix and mix thoroughly but gently to ensure even distribution of components.

Dilute your standard DNA and experimental samples with nuclease-free water to the desired concentrations and add them to their designated wells in the multi-well plate. For negative control, add nuclease-free water.

Keep the plate on ice until further use.

COMPONENT	VOLUME	FINAL CONCENTRATION
2X ProPlant SYBR Mix	10 µl	1X
Template DNA	X µl	max. 2 µl
Forward primer (10 µM)	0.4 µl	0.05 – 0.9 µM each
Reverse primer (10 µM)	0.4 µl	0.05 – 0.9 µM each
Nuclease-free dH ₂ O	X µl	to 20 µl

RECOMMENDED qPCR PROTOCOL

STEP	CYCLES	TEMPERATURE	TIME
Initial Denaturation	1	95°C	5 minutes
Amplification	40	95°C	10 seconds
		55-60°C	60 seconds

Add an additional melting curve step if required. A melting curve is recommended to ensure specific amplification and to detect possible primer oligomers and non-specific products.