RealHelix™ Superplex qPCR Kit [Probe]

Kit Contents

RealHelix™ Superplex qPCR Kit [Probe]		
Cat. No.	**SUQ-P200 (200rxns)**	**SUQ-P500 (500rxns)**
Superplex 2x Premix [Probe]	1ml x 2ea	1ml x 5ea
ROX Dye (25μM)	0.2ml	0.5ml
Instructions for Use	1ea	1ea

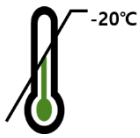
Description

RealHelix™ Superplex qPCR Kit [Probe] is designed for multiple target qPCR detections using dual-labeled probes in real time PCR instruments. The kit consists of convenient 2x concentrated premix solution and ROX Dye. The user convenient 2x premix contains all required components including a hot-start Taq polymerase, heat-labile Uracil-DNA glycosylase, dUTP, dNTPs, buffer, magnesium ion and stabilizing agents. The hot-start Taq polymerase provides high specific amplification of target DNA and minimizes the side products such as primer dimers. This UDG/dUTP system prevents the carryover contamination of PCR products from previous reactions. Included ROX Dye could be used as a passive reference dye.

Application

Quantification of target DNA sample by real time PCR

Storage



Store below -20℃

※ ROX Dye should be stored in the dark.

Shelf life

12 months

NanoHelix Co., Ltd.

F711-1(Rev.0)

A-dong and B-dong, 43-15, Techno 5-ro, Yuseong-Gu, Daejeon, 34014, Republic of Korea TEL : 82-42-867-9055, FAX : 82-42-867-9057

E-mail : info@nanohelix.net <www.nanohelix.net www.nanohelix.net/KOR>

Quality Control

By Nanohelix's ISO 13485-certified quality management system, each lot of **RealHelix™ Superplex qPCR Kit [Probe]** was tested against predetermined specifications to ensure consistent product quality.

Protocol

1. Program a real-time PCR instrument according to the recommendations below.

Step	Condition		Cycle(s)
[Optional] UDG Reaction*		20 ~ 25℃ for 5 min	1
Enzyme activation		95℃ for 15 min	1
PCR Amplification	Denaturation	95℃ for 20 sec	40
	Annealing**	**AT**℃ for 20~30 sec	
	Extension	72℃ for 1 min/kb **Collect the fluorescence data**	

* The UDG reaction step is not essential. The UDG will efficiently remove carryover contaminant DNA during sample setup and cycler ramping.

** Annealing Temperature = T_m – (6 ~ 8℃)

Where, T_m (Melting Temp.) = [4℃ x (G + C)] + [2℃ x (A + T)]

2. Add following components for a single 20µl reaction volume. *

Components	Volumes
DNA Template (1ng ~ 1µg)	x µl
Superplex 2x Premix [Probe]	10µl
Forward primers (10µM)	0.2 ~ 0.5µl [1)]
Reverse primers (10µM)	0.2 ~ 0.5µl [1)]
Probes (10µM)	0.1 ~ 0.5µl
ROX Dye (25µM)	Optional [2)]
RNase-free Water	Adjust to final 20µl

* For multiple reactions, prepare a master mix by adding the required volumes of each above components (except the DNA template) and dispense appropriate volumes into PCR tubes or plates.

A-dong and B-dong, 43-15, Techno 5-ro, Yuseong-Gu, Daejeon, 34014, Republic of Korea TEL : 82-42-867-9055, FAX : 82-42-867-9057

E-mail : info@nanohelix.net <**www.nanohelix.net www.nanohelix.net/KOR**>

[1] The amount of each primer should be adjusted according to the efficiencies of target amplifications.

[2] Use the recommended amount or concentration of ROX Dye (Passive Reference) depending on the instrument.

3. Gently mix and briefly centrifuge the reaction mix.

4. Perform the Real-time PCR.

Products

Cat. No.	Products	Size
SUQ-P200	RealHelix™ Superplex qPCR Kit [Probe]	200rxns
SUQ-P500	RealHelix™ Superplex qPCR Kit [Probe]	500rxns

A-dong and B-dong, 43-15, Techno 5-ro, Yuseong-Gu, Daejeon, 34014, Republic of Korea TEL : 82-42-867-9055, FAX : 82-42-867-9057

E-mail : info@nanohelix.net <**www.nanohelix.net www.nanohelix.net/KOR**>