

2x PCR TaqNova-RED

PCR Master Mix



blirt

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2x PCR TaqNova-RED is a 2x concentrated, ready-to-use PCR master mix which facilitates an easy and rapid PCR reaction set up. The **2x PCR TaqNova-RED** solution contains a reaction buffer, magnesium chloride, dNTPs and a thermostable *Taq* DNA polymerase. In order to set-up the PCR reaction, all that needs adding to the master mix is the template, the primer set and water. This convenient **2x PCR TaqNova-RED** master mix reduces the time required to set-up PCR reactions and decreases the possibility of contamination, particularly when preparing large numbers of reactions. Moreover, the master mix is supplemented with an inner dye and a density reagent, which allows for direct loading of PCR products to a gel.

Features and advantages

- Convenient – the *TaqNova* Polymerase in a ready-to-use mix
- Consistent results
- Suitable for a wide range of applications
- Recombinant enzyme of high purity
- Half-life of the enzyme is 45 minutes at 95°C
- Amplifies fragments of up to 5 kb
- Leaves 'A' overhangs
- Facilitate high throughput PCR reaction set-up
- Reduced risk of contamination
- Direct gel loading

Applications

- Efficient amplification of short and medium size DNA sequences
- Routine PCR
- Diagnostic PCR
- TA cloning



Protocol

1. Prior to use, thaw the Master Mix solution and other reagents completely, mix thoroughly and spin briefly.
2. Add the following reaction reagents to a sterile nuclease-free PCR Eppendorf tube:

Reagent	Suggested amount per reaction	Acceptable final concentrations in reaction mixture
2x PCR TaqNova-RED	25 µl	1x
10 µM Forward primer	1 µl	0.1 – 1 µM
10 µM Reverse primer	1 µl	0.1 – 1 µM
DNA template	1 – 100 ng	10 pg – 0.5 µg
PCR-grade water	fill up to 50 µl	fill up to required volume

This composition is intended for use as a guide only; conditions will vary from reaction to reaction and may require optimising.

3. Mix the prepared reaction mixture thoroughly by pipetting or vortexing, then spin briefly.
4. Place the prepared PCR mixture in a thermal cycler and start the PCR reaction.
5. After reaction has finished, apply the reaction mixtures directly onto a gel.

Troubleshooting

For problems which may be encountered during PCR reaction set up and analysis, possible causes and solutions see: www.blirt.eu.

2x PCR TaqNova-RED PCR Master Mix

Components	RP85T 100 rxns (50 µl)	RP85T-10 1000 rxns (50 µl)	RP85T-S 10 rxns (50 µl)
2x PCR TaqNova-RED PCR Master Mix	2 x 1.25 ml	20 x 1.25 ml	250 µl
PCR – grade water	2 x 1.5 ml	20 x 1.5 ml	300 µl

Formulation

2x concentrated PCR reaction buffer, 4 mM MgCl₂; 1.6 mM dNTPs mix (0.4 mM of each dNTP); 0.04 U/µl TaqNova DNA Polymerase, red inner dye and density reagent.

Quality control

Free of unspecific nucleases contamination. Extensively tested for PCR applications.

Storage & shipping

Storage conditions

Store all components at -20°C. After thawing, the product will remain stable at +4°C for at least two months. Up to ten freeze/thaw cycles will not compromise product performance.

Shipping conditions

Shipping on dry or blue ice.

 For research use only

Expiry

The information on the label