

User Manual AN008.V1

# 2x Nova Rapid PCR mix

# **Product information:**

2x Nova Rapid PCR mix is a user-friendly, pre-mixed 2x concentrated solution for Polymerase Chain Reaction (PCR) that contains NovaTag Plus DNA Polymerase from ANGENOVO, PCR Buffer, Mg2+, dNTPs, PCR Stabilizer, and PCR Intensifier. The master mix delivers high sensitivity, specificity, and stability, making it ideal for PCR amplification of complex templates and large-scale gene testing. With high amplification efficiency and low mismatching rate, the mix reduces the risk of personal error and contamination, and allows for a fast amplification rate of 10-15 seconds per 1kb. The PCR product is equipped with adenine residues at the 3'-end of both strands, making it suitable for TA cloning, enzyme digestion, ligation, and sequencing after purification. The blue dye (Bromophenol Blue, with a migration equivalent to a 500bp DNA fragment) included in the master mix enables direct loading of the PCR product onto an agarose gel for analysis.

Components	Cat.No.: AN008-1	Cat. No.: AN008-2	Storage
2x Nova Rapid PCR mix	1ml	5x 1ml	-20°C



This product is intended for use by trained laboratory personnel only. It is important to follow proper laboratory safety protocols when handling this product. This includes wearing appropriate protective eyewear, clothing, and gloves to reduce the risk of exposure. In the event of contact with skin or eyes, rinse immediately with copious amounts of water and seek medical attention if necessary.

# **Applications:**

Gene test, semi- qPCR, detection of trace DNA, Gene cloning, SNP analysis, site-directed mutagenesis.

# Storage solution components:

2x Nova Rapid PCR mix contains NovaTaq DNA Polymerase, 300  $\mu$ M dNTP each, 20 mM Tris-HCl (pH8.7), 100 mM KCl, 3 mM MgCl2.

### **Protocol:**

# PCR reaction 20µl mixture:

DNA template	< 1µg
2x Nova Rapid PCR mix	10µl
Primer Forward (10μM)	0.5 μΙ
Primer Reverse (10μM)	0.5 μΙ
Nuclease-free water	Fill to 20µl

#### Suggested PCR program:

95°C	3 min
32-36 cycles of:	
95°C	25 sec
55-64°C	25 sec
72°C	10-15 sec per kb
72°C	5min
4°C	Hold

### Shipping and storage:

Upon receiving the product, store the product at suggested conditions. Shipping and temporary storage for up to 10 days at room temperature has no detrimental effects on the quality of the product. -20°C constant temperature for long-term storage, 4°C for six months; Avoid repeated freezing and thawing.

### **Technical support:**

If you have any questions or concerns, please don't hesitate to reach out to our support team at support@angneovo.no. Our knowledgeable and friendly team is available to assist you and ensure a positive experience with our product.

### **Disclaimer And Warranty:**

This product is compliant with its relevant specifications and intended for its stated purpose. However, ANGENOVO AS does not provide any other warranty or guarantee regarding the product's description or quality. Any such warranties or guarantees are explicitly excluded to the fullest extent allowed by law. ANGENOVO AS will not be held liable for any special, incidental, indirect, multiple or consequential damages related to or arising from the use of this product. The liability of ANGENOVO AS will not be limited or excluded for death or personal injury caused by its negligence, fraud, or fraudulent misrepresentation or any matter where it would be illegal to exclude or restrict such liability.

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