

## Atlas RedTaq 2x PCR Mix

Cat. No.	Pack Size
BAS0011	10 rxn (100 µl)
BA01507	100 rxn (1 ml)

### Storage:

Store at -20°C, shipping at room temperature.

### Quantity:

The mixture contains 100 units of Atlas RedTaq Hot Thermostable DNA Polymerase. It is sufficient for 100 reactions of 20 µl or 40 reactions of 50 µl.

### Reagents Provided:

- **Atlas RedTaq DNA Polymerase** (0.1 U/µl) in reaction buffer
- **4 mM MgCl<sub>2</sub>**
- **0.4 mM of each dNTPs** (dATP, dCTP, dGTP, dTTP).
- **Water** (nuclease free) - 1 ml.

### Description:

Atlas RedTaq 2x PCR Mix is a premixed solution containing everything needed for successful PCR reaction except specific primers and DNA template. The mix includes high-quality recombinant Atlas RedTaq Hot Thermostable DNA polymerase, nucleotides and magnesium in a PCR reaction buffer.

The mix has a special additive - the inert red dye. This makes it very suitable for standard applications. Strong red color of the mix allows user to verify adequate mixing.

Reaction products are ready for direct gel loading and the dye serves as marker for electrophoresis progress monitoring.

For the reaction set-up add the PCR Mix (10 or 25 µl) to the primers, template and water for the total reaction volume of 20 or 50 µl.

To activate the Atlas RedTaq Hot Thermostable DNA polymerase it should be incubated at 95 - 97°C for 15 minutes as a first PCR step.

This enzyme mix allows the PCR setup at ambient temperature without nonspecific annealing and extension.

### Quality data:

Activity and stability tested at 20, 30 and 40 cycles of PCR reactions at 95°C. Free of detectable, non-specific nucleases.

Several cycles of freezing/thawing are allowed.

### Recommended PCR reaction mix:

Component	Quantity
Atlas RedTaq 2x PCR mix	10 µl (1x)
Primer Forward	0.3 -1 µM
Primer Reverse	0.3 -1 µM
DNA template	1-100 ng/µl
H <sub>2</sub> O PCR grade	Up to 20 µl
<b>Total</b>	<b>20 µl</b>

**Recommended PCR cycles:**

Cycle step	Temp.	Time	Cycles
Initial denaturation	95°C	15 min	1
Denaturation	95°C	30-60 s	26-35
Annealing	50-68°C	30-60 s	
Elongation	72°C	1-4 min	
Final elongation	72°C	5-10 min	1

**IMPORTANT:** Annealing temperature should be 2-6°C lower than the primer melting temperature.

**Safety warnings and precautions:**

This product is designed for research purposes and *in vitro* use only. According to common laboratory safety practice, it is recommended to wear protective clothing, gloves and safety glasses. Please refer to [www.bioatlas.com](http://www.bioatlas.com) for Material Safety Data Sheet of the product.

*Some applications this product is used in may require a license which is not provided by the purchase of this product. Users should obtain the license if required.*