

# Optimase ProtocolWriter™ Software

## Your Passport to Successful PCR



Access ADS Biotec's free PCR protocol software for the proofreading enzyme Optimase® Polymerase at [www.MutationDiscovery.com](http://www.MutationDiscovery.com)®

**Optimase ProtocolWriter™**

This tool will generate PCR protocols for use with Optimase, the high-fidelity polymerase product from Transgenomic. To generate a PCR protocol, enter your primers and anticipated PCR product length, and select a PCR protocol type. When you click on "Develop PCR protocol", this software will generate the appropriate PCR protocol.

Forward primer sequence:  Tm = 46.7°C  
 Reverse primer sequence:  Tm = 48.8°C  
 PCR product length:  bp  
 Protocol type:

Optimase ProtocolWriter software uses a robust algorithm for optimization of PCR reactions with Optimase Polymerase. Simply enter forward and reverse primer sequences and anticipated PCR product length. Optimase ProtocolWriter software develops the simple three-step or touchdown PCR protocol.

To use Optimase ProtocolWriter software:

1. Access [www.MutationDiscovery.com](http://www.MutationDiscovery.com) and click on Optimase ProtocolWriter.
2. Do the following:
  - a) Enter the sequence of the PCR primers in the Forward primer sequence field and the Reverse primer sequence field.
  - b) Enter the number of base pairs in the PCR product length field.
  - c) Select the desired PCR approach in the Protocol type field.
3. Click on the Develop PCR Protocol button. Optimase ProtocolWriter software displays the PCR protocol.

Optimase MasterMix Calculator is designed to generate PCR master mix reagent volumes based on the following parameters:

- Number of reactions
- Reaction volume
- Percent allowance for error
- Presence of Magnesium Sulfate (optional)

**Optimase Master Mix Calculator**

NUMBER OF REACTIONS:   
 REACTION VOLUME:  µl  
 ALLOWANCE FOR ERROR:  %  
 Magnesium sulphate in buffer?

Reagent	Stock Concentrations	Desired Values	Reaction Mix (µl)
Reaction buffer	10 X	1 X	55
Magnesium Sulphate	25 mM	2.5 mM	N/A
dNTPs (total)	10 mM	0.8 mM	44
Forward primer	50 µM	0.4 µM	4.4
Reverse primer	50 µM	0.4 µM	4.4
DNA template	100 ng/µl	100 ng	11
Optimase	2.5 U/µl	1 U	4.4
Water			426.8
Total reaction volume:			550 µl

### Contact Information



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*Increased Productivity with High Quality and Consistency*