

# Product Insert AccuSure™ Mix

Research Use Only

## Product:

AccuSure™ Mix

#### Catalogue numbers:

BIO-25029 100 reactions BIO-25030 500 reactions

### **Description:**

 Extremely high-fidelity coupled with highspecificity

AccuSure<sup>TM</sup> Mix is a complete ready-to-go heat-activated 2x reaction-mix, which requires the consumer to add only water, template and primers to successfully carry out High fidelity Polymerase assays. AccuSure<sup>TM</sup> Mix has all of the properties of our AccuSure<sup>TM</sup> DNA Polymerase and is therefore ideally suited to applications requiring high-fidelity coupled with high-specificity.

The mix has been optimised for a wide variety of templates, however a 50mM magnesium solution is included in case any fine adjustments are required.

AccuSure<sup>TM</sup> Mix dramatically reduces the time needed to set up reactions, thereby reducing the risk of contamination. Greater reproducibility is ensured, by reducing the number of pipetting steps that can lead to pipetting errors.

Once reactions are optimised, the versatility of this product can be fully realised, all mixes have been tested for scalability, and the mix, (when used at 2x concentration) can be used in reaction volumes from 5µl upwards.

**Extended Stability:** The product was stored at +20 °C over a 5 week period and tested daily. No detectable loss of activity was evidenced.

Due to potential of microbiological contamination, +4°C storage should not exceed 4 weeks

## Composition of supplied 2x ACCUSURE™ Mix

120mM Tris-HCI (pH 8.3 at 25°C) 12mM (NH<sub>4</sub>)<sub>2</sub>SO<sub>4</sub> 20mM KCI 4mM MgSO<sub>4</sub> 2mM dNTP's Stabiliser AccuSure<sup>TM</sup> DNA Polymerase

## Batch details:

Batch No: See vial

### **Storage Conditions:**

2x AccuSure™ Mix can be stored for: 6 months at -20°C 2 weeks at 4°C

Shipping: At 4°C or- 20°C

Repeated freeze/thaw should be avoided.

### **Directions for Use:**

The Bioline AccuSure<sup>TM</sup> Mix is designed with ease-of-use in mind. Each reaction requires  $25\mu l$  of 2x AccuSure<sup>TM</sup> Mix in addition to Primers and Template, and sufficient  $18.2 \text{ m}\Omega$  water for a final reaction-volume of 50ul.

### Reaction Conditions

## For a 50µl reaction

Activation: 7 minutes at 95°C

Denature: 94-97°C

Extension: 72°C Allowing 1.5-2 mins per KB

This data is intended for use as a guide only; conditions will vary from reaction to reaction and may need optimisation.

An additional tube of 50mM MgCl $_2$  is provided should any fine adjustments be necessary. The table below shows the volume of MgCl $_2$ to add to achieve different final concentrations.

Final.Magnesium	Volume of 50mM MgCl <sub>2</sub> to
concentration required	add to a 50µl final reaction
	volume
2.0mM	0
2.5mM	0.5µl
3.0mM	1μΙ

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This product contains a declaration of analysis at the time of manufacture