5x HOT FIREPol® Blend Master Mix
with 12.5 mM MgCl₂

Description:
5x HOT FIREPol® Blend Master Mix is a premixed ready-to-use solution containing all reagents required for PCR except template, primers and water.

HOT FIREPol® Blend Master Mix contains two carefully optimized enzymes – HOT FIREPol® DNA polymerase and a proofreading polymerase. This enzyme blend has both the 5'→3' exonuclease activity as well as the 3'→5' proofreading activity. HOT FIREPol® Blend Master Mix exhibits an increased fidelity (up to five fold) compared to HOT FIREPol®.

Mix Composition:
- HOT FIREPol® DNA polymerase
- Proofreading enzyme
- 5x Blend Master Mix Buffer
- 12.5 mM MgCl₂
- 2 mM dNTPs of each
  - 1x PCR solution – 2.5 mM MgCl₂
  - 200 µM dATP, 200 µM dCTP, 200 µM dGTP and 200 µM dTTP
- BSA

Shipping and Storage conditions:
Routine storage: -20°C
Shipping and temporary storage for up to 1 month at room temperature or storage for up to 6 months at 2-8°C has no detrimental effects on the quality of 5x HOT FIREPol® Blend Master Mix.

Quality Control:

<table>
<thead>
<tr>
<th>Assay</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Amplification efficiency</td>
<td>≥10⁵ fold</td>
</tr>
<tr>
<td>PCR reproducibility</td>
<td>passed</td>
</tr>
<tr>
<td>ds Endodeoxyribonuclease activity</td>
<td>no</td>
</tr>
<tr>
<td>ss Exodeoxyribonuclease activity</td>
<td>no</td>
</tr>
<tr>
<td>Self-priming activity</td>
<td>no</td>
</tr>
</tbody>
</table>

Safety warnings and precautions:
This product and its components should be handled only by persons trained in laboratory techniques. It is advisable to wear suitable protective clothing, such as laboratory overalls, gloves and safety glasses. Care should be taken to avoid contact with skin or eyes. In case of contact with skin or eyes, wash immediately with water.

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.

FOR RESEARCH USE ONLY

APPROVED BY:

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Solis BioDyne
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