

CycleFasst HS Euroclone®

Master mix for hot start PCR

Order information

Cat.#	Description	Format
EMX013200	CycleFasst HS	200 reactions

Storage and stability

Store at +4°C.

Kit Content

CycleFasst HS is a master mix for Hot Start PCR including high quality reagents for the amplification of nucleic acid templates. It contains **RighTaq**, the immuno-blocked Taq from Euroclone. This enzyme is complexed with a monoclonal antibody blocking the polymerase activity at ambient temperature. Heat activation of **RighTaq** occurs during the first denaturation step. An active complex of **RighTaq** dissociates automatically over 70°C, allowing activation of DNA polymerase. This procedure gives an automatic hot start for Taq DNA polymerase in PCR increasing sensitivity, specificity and yield. **RighTaq** can eliminate amplification artifacts such as primer-dimer formation and mispriming. The lack of activity at room temperature allows to prepare the reactions avoiding to keep the PCR mixes in wet ice.

CycleFasst HS is supplied at a 2X concentration to allow the addition of primer and template solutions. This master mix is enough for 200 amplification reactions of 50 µl final volume and is provided in four vials of 50 reactions each. For possible magnesium titrations a further vial containing 50mM MgCl₂ is included.

Reagent	Format	Quantity	Formulation
CycleFasst HS	1.250 ml	4 vials	0.4 units/µl EuroTaq; 3.2 mM dNTPs; 3mM MgCl ₂ 32 mM (NH ₄) ₂ SO ₄ ; 134 mM Tris HCl pH 8.8; 0.02% Tween-20; stabilizers.
MgCl ₂	1.5 ml	1 vial	50mM MgCl ₂

Notes

All needed precautions should be taken to avoid cross contamination. Best is prepare amplification reactions in a DNA-free environment. Use of aerosol resistant barrier tips is recommended. PCR products should be analyzed in an area separate from the reaction assembly area.

Protocol

1) Add to a new a clean microtube the following components:

CycleFasst HS	25 µl
Primers	200 nM each, final concentration
DNA template	variable
ddH ₂ O	To reach 50 µl

2) Mix contents of the tubes, cap tubes and load thermal cycler.

3) Start cycling program file.