

# CycleFasst



Master mix for PCR

## Order information

Cat.#	Description	Format
EMX010200	<b>CycleFasst</b>	200 reactions

## Storage and stability

Store at -20°C.

## Kit Content

**CycleFasst** is a master mix for conventional PCR including high quality reagents for the amplification of nucleic acid templates. It contains EuroTaq, a Taq DNA polymerase engineered to obtain the best amplification yield and the maximum specificity even in multiplex PCR.

**CycleFasst** is supplied at a 2X concentration to allow the addition of primers 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 MgCl<sub>2</sub> is included.

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

## 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:

<b>CycleFasst</b>	25 µl
Primers	200 nM each, final concentration
DNA template	variable
ddH <sub>2</sub> O	To reach 50 µl

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

3) Start cycling program file.

Euroclone, SpA has a Quality System certified by Dasa-Raegister in compliance with EN ISO 9001 (2000).

EMX010-03016 F0

# 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 MgCl<sub>2</sub> is included.

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

## 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:

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

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

3) Start cycling program file.

Euroclone, SpA has a Quality System certified by Dasa-Raegister in compliance with EN ISO 9001 (2000).

EMX013-0406 R0

# CycleFasst Load'N'use

Pre-aliquoted, ready-to-use Master Mix for PCR

## Order information

Cat.#	Description	Format
EMX012096	CycleFasst Load'N'use	96 reactions

## Storage and stability

Store at -20°C.

## Kit Content

**CycleFasst Load'N'use** is a master mix for conventional PCR including high quality reagents for the amplification of nucleic acid templates. It contains EuroTaq, a Taq DNA polymerase engineered to obtain the best amplification yield with the maximum specificity even in multiplex PCR.

**CycleFasst Load'N'use** is supplied in a pre-aliquoted format, 12x8 tube strips. Each tube is individually capped for an easier handling of the sample and it contains 25µl of the 2x concentrated PCR solution, for a better setting of the amplification volume. This kit is enough for 96 amplification reactions of 50 µl final volume. For possible magnesium titrations a further vial containing 50mM MgCl<sub>2</sub> is included.

Reagent	Format	Quantity	Formulation
<b>CycleFasst Load'N'use</b>	25µl	96 tubes	0.4 units/µl EuroTaq; 3.2 mM dNTPs; 3mM MgCl <sub>2</sub> ; 32 mM (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> ; 134 mM Tris HCl pH 8.8; 0.02% Tween-20; stabilizers.
MgCl <sub>2</sub>	0.4 ml	1 vial	50mM MgCl <sub>2</sub>

## 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) Take from the kit only the tubes you need: take out of the -20°C freezer enough microtube to process your samples, do not allow the remain of the kit to stay at temperature higher than -20°C.
- 2) Add to the **CycleFasst Load'N'use** microtubes to be processed the following components:
 

Primers	200 nM each, final concentration
DNA template	variable
ddH <sub>2</sub> O	To reach 50µl, considering that each tube contains already 25µl of master mix 2X concentrated
- 3) Mix contents of the tubes, cap tubes and load thermal cycler.
- 4) Start cycling program file.

Euroclone, SpA has a Quality System certified by Dasa-Raegister in compliance with EN ISO 9001 (2000).

EMX012-0406 FO

# CycleFasst Load'N'use HS

Pre-aliquoted, ready-to-use Master Mix for Hot Start PCR

## Order information

Cat.#	Description	Format
EMX014096	CycleFasst Load'N'use HS	96 reactions

## Storage and stability

Store at -20°C.

## Kit Content

**CycleFasst Load'N'use 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 Load'N'use HS** is supplied in a pre-aliquoted format, 12x8 tube strips. Each tube is individually capped for an easier handling of the sample and it contains 25µl of the 2x concentrated PCR solution, for a better setting of the amplification volume. This kit is enough for 96 amplification reactions of 50 µl final volume. For possible magnesium titrations a further vial containing 50mM MgCl<sub>2</sub> is included.

## Reagent

Reagent	Format	Quantity	Formulation
<b>CycleFasst Load'N'use HS</b>	25µl	96 tubes	0.4 units/µl EuroTaq; 3.2 mM dNTPs; 3mM MgCl <sub>2</sub> 32 mM (NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub> ; 134 mM Tris HCl pH 8.8; 0.02% Tween-20; stabilizers.
MgCl <sub>2</sub>	0.4 ml	1 vial	50mM MgCl <sub>2</sub>

## 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) Take from the kit only the tubes you need: take out of the -20°C freezer enough microtube to process your samples, do not allow the remain of the kit to stay at temperature higher than -20°C.
- 2) Add to the **CycleFasst Load'N'use HS** microtubes to be processed the following components:
 

Primers	200 nM each, final concentration
DNA template	variable
ddH <sub>2</sub> O	To reach 50µl, considering that each tube contains already 25µl of master mix 2X concentrated
- 3) Mix contents of the tubes, cap tubes and load thermal cycler.
- 4) Start cycling program file.

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EMX014-0406 PC