



GeneAce SYBR[®] qPCR Mix α Low ROX

I. Description

GeneAce SYBR[®] qPCR Mix α Low ROX is a convenient 2X premix for real-time qPCR using SYBR[®] Green I dye. This product was optimized for instruments that require a low ROX reference signal for fluorescence normalization (Compatible instruments: ABI 7500, Stratagene Mx3000P / 3005 / 4000, etc.).

This product provides high specificity and reproducibility and allows for reducing non-specific amplification by using optimized buffer components and Hot-Start Gene Taq NT, a chemically modified Taq DNA Polymerase.

II. Storage

-20°C, protected from light.

This product should be protected from light. After thawing, the master mix may be stored at 4°C for up to one month or returned to -20°C for long term storage.

III. Components

	60 rxns	300 rxns
2 x GeneAce SYBR qPCR Mix α Low ROX ^{*1)}	1.5 ml x 1	1.5 ml x 5

*1) It contains Hot-Start Gene Taq NT, dNTP Mixture, Mg²⁺, SYBR[®] Green I, ROX reference dye, stabilizer.

IV. Notes

- **The PCR must start with an initial 10 minutes incubation at 95°C to activate the chemically modified hot-start Taq DNA polymerase.**
- **We recommend two-step cycling protocols. (See V. Typical PCR protocol)**
- **This product cannot be used for runs in "Fast"^{*2)} mode on ABI real time instruments.**

*2) 95°C 20 sec → (95°C 3 sec, 60°C 30 sec) x cycle numbers

- Always ensure that the product has been fully thawed and mixed before use. Gently mix the mixtures without creating bubbles.
- Uracil-N-Glycosylase treatment is unusable on this product.

V. Typical PCR Protocol

Choose an appropriate total reaction volume, depending on the instrument used. (e.g., 50 μ l or 25 μ l)

Component	Volume	Volume
2x GeneAce SYBR qPCR Mix α Low ROX	25.0 μ l	12.5 μ l
25 μ M each Primers	1.0 μ l	0.5 μ l
Template	5.0 μ l	2.5 μ l
d.d.H ₂ O	up to	50.0 μ l
		25.0 μ l

Recommended cycler conditions

95°C 10 min. Enzyme activation ^{*3)}

95°C 30 sec.
60°C 1 min.) 45 cycles



Melting curve analysis

Optimum PCR condition depends on primer sequence and template DNA and so on.

*3) Ensure that the cycling program includes the DNA polymerase activation step. Initial 10 minutes incubation at 95°C is required.

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GeneAce SYBR[®] qPCR Mix α Low ROX

I. 製品説明

GeneAce SYBR[®] qPCR Mix α Low ROX は、ROXを用いてウェル間の蛍光シグナルの補正を行うリアルタイム PCR 装置 (ABI 7500、Stratagene Mx3000P / 3005 / 4000 等) に対応したインターカレーター法用のリアルタイム PCR 用試薬です。2 x 濃度に予め調製されたマスターミックスが小分け分注済みです。

本製品は、ホットスタート PCR 用酵素 Hot-Start Gene Taq NT と最適化されたバッファーにより、非特異的増幅を抑制し、高い特異性と再現性を実現しています。

II. 保存

-20°C (遮光)

4°C 保存 (遮光) も可能ですが、その場合は 1 ヶ月以内にご使用下さい。

III. 製品内容

試薬	60 反応用	300 反応用
2 x GeneAce SYBR qPCR Mix α Low ROX *1)	1.5 ml x 1 本	1.5 ml x 5 本

*1) Hot-Start Gene Taq NT, dNTP Mixture, Mg²⁺, SYBR[®] Green I, ROX Reference Dye, stabilizer を含んでいます。

IV. 注意

- 化学修飾を施したホットスタート PCR 用酵素を用いているため、酵素活性化ステップ (95°C 10min.) を必ず実施して下さい。
- 推奨 PCR サイクル条件にてご使用下さい。(V. 使用例 参照)
- ABI リアルタイム PCR 装置のランモード「Fast」*2) には対応しておりません。
 - *2) 95°C 20 sec → (95°C 3 sec, 60°C 30 sec) x サイクル数
- 使用時は、泡立てないように穏やかに転倒混和し、試薬を十分均一にしてからご使用下さい。
- Uracil-N-Glycosylase によるキャリアオーバー処理は出来ません。

V. 使用例

ご使用の装置に対応した反応液量でご使用下さい。

< 反応液 (例) >	[50 μ l 系]	[25 μ l 系]
2x GeneAce SYBR qPCR Mix α Low ROX	25.0 μ l	12.5 μ l
25 μ M each Primers	1.0 μ l	0.5 μ l
Template	5.0 μ l	2.5 μ l
d.d.H ₂ O	up to 50.0 μ l	25.0 μ l

< 推奨 PCR サイクル条件 > *3)

95°C 10 min.
95°C 30 sec.
60°C 1 min.) 45 cycles



融解曲線解析

プライマーの設計や鋳型 DNA 等により反応の至適条件が変わることがあります。

*3) 酵素の活性化ステップは、95°C 10 分間必ず行って下さい。

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