NIPPON GENE

GeneAce SYBR® qPCR Mix α

I. Description

GeneAce SYBR® qPCR Mix α is a convenient 2X premix for real-time qPCR using SYBR® Green I dye. This product was optimized for instruments that require a high ROX reference signal for fluorescence normalization (Compatible instruments: ABI PRISM® 7000/7700/7900HT, ABI 7300, and ABI GeneAmp® 5700, 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 *1)	1.5 ml x 1	1.5 ml x 5

*1) It contains Hot-Start Gene *Taq* NT, dNTP Mixture, Mg^{2+}, 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 µl or 25 µl)

Component		Volume	Volume
2 x GeneAce SYBR qPCR Mix α		25.0 µl	12.5 µl
25 µM each Primers		1.0 µl	0.5 µl
Template		5.0 µl	2.5 µl
d.d.H_2O	up to	50.0 µl	25.0 µl

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 95ºC is required.

For Licensee Products sold in the Research Field:

This product is provided under an intellectual property license from Life Technologies Corporation. The transfer of this product is conditioned on the buyer using the purchased product solely in research conducted by the buyer, excluding contract research or any fee for service research, and the buyer must not (1) use this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; or (c) manufacturing or quality assurance or quality control, and/or (2) sell or transfer this product or its components for resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com.

ニッポン・ジーン

GeneAce SYBR® qPCR Mix α

I. 製品説明

GeneAce SYBR® qPCR Mix α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 PRISM® 7000 / 7700 / 7900HT 、ABI 7300 、ABI GeneAmp® 5700 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℃ (遮光)

4℃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 *1)	1.5 ml x 1 本	1.5 ml x 5 本

＊1) Hot-Start Gene *Taq* NT, dNTP Mixture, Mg^{2+}, 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℃ 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℃ 20 sec →(95℃ 3 sec , 60℃ 30 sec)×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によるキャリー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 µl 系]	[25 µl 系]
2 x GeneAce SYBR qPCR Mix α		25.0 µl	12.5 µl
25 µM each Primers		1.0 µl	0.5 µl
Template		5.0 µl	2.5 µl
d.d.H_2O	up to	50.0 µl	25.0 µl

＜推奨 PCR サイクル条件＞*3)

95℃ 10 min.
95℃ 30 sec.
60℃ 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℃10 分間必ず行って下さい。

For Licensee Products sold in the Research Field:

This product is provided under an intellectual property license from Life Technologies Corporation. The transfer of this product is conditioned on the buyer using the purchased product solely in research conducted by the buyer, excluding contract research or any fee for service research, and the buyer must not (1) use this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; or (c) manufacturing or quality assurance or quality control, and/or (2) sell or transfer this product or its components for resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5781 Van Allen Way, Carlsbad, CA 92008 USA or outlicensing@lifetech.com.

本製品は、試薬（試験研究用）として販売しているものです。
医薬品の用途には使用しないでください。

株式会社ニッポンジーン
www.nippongene.com
TEL 076-451-6548 FAX 076-451-6547