

β-actin Control kit Technical Data Sheet

Reference: RT-CKYD-ACTB

Products and procedures described in this protocol are intended for research purposes only.

Storage conditions

The β-actin Control kit should be stored at -15 °C to -25 °C in a constant temperature freezer. When stored under these conditions the reagents are stable for 1 year.

Kit contents

The β-actin Control kit contains enough reagents for up to 250 - 50 μl reactions.

Reagent	Volume	Description
ACTB primer mix (plain cap)	750 μl	One tube of primer mix 10 μM
ACTB probe (brown cap)	250 μl	One tube of 12.5 μM Yakima Yellow®-Eclipse® DarkQuencher probe

The β-actin Control kit Yakima Yellow®-Eclipse® DarkQuencher should be combined with Eurogentec Reverse Transcriptase core kit (first strand reaction kit) reference RT-RTCK-05 followed by Eurogentec qPCR MasterMixes, reference RT-QP2X-03 or qPCR Core kits, reference RT-QP73-05. Alternatively a One step RTqPCR MasterMix Plus, reference RT-QPRT-032X can also be combined with the Control kit. Alternatively a qPCR MasterMix (RT-QP2X-03) can be combined with the control kit for quantitation of gDNA.

The kit is available with a Yakima Yellow®-Eclipse® DarkQuencher labelled probe detected in channel 2 for multiplex qPCR.

Procedure

We strongly recommend preparation of a reaction mix

Each 50 μl reaction requires the addition of 3 μl of ATCB Primer Mix (plain cap) and 1 μl of ACTB Probe (brown cap).

If required a mix containing the appropriate amount of both primer and probe can be prepared. Dispense 4 μl of this mix per 50 μl reaction.

Final concentration of primers is 600 nM.

Final concentration of probe is 250 nM.

Prepare an appropriate dilution series of chromosomal DNA in TE or PCR grade water and a no template control.

The β-actin Control Kit has been developed to detect the human β-actin gene (cDNA/ gDNA). The obtained amplicon is 92 bp in length, to guarantee an efficient PCR.

Program the Real-Time thermocycler using the following recommended parameters:

HotGoldStar activation	10 min. 95 °C
40 Cycles	15 sec. 95 °C 1 min. 60 °C
Hold at 25 °C forever	

If UNG is used, program the Real-Time thermocycler using the following recommended parameters:

UNG activation	2 min. 50 °C
HotGoldStar activation / UNG incativation	10 min. 95 °C
40 Cycles	15 sec. 95 °C 1 min. 60 °C
Hold at 50 °C forever	

Other Eurogentec Control Kits available:

Eurogentec has developed control kits that can be used for either cDNA or cDNA and gDNA.

18S rRNA Control Kit

human, rat, mouse, rabbit cDNA and gDNA
very high expression level
RT-CKYD-18S or RT-CKFT-18S

23S rRNA Control kit

E. coli
very high expression level
RT-CKFT-23S

28S rRNA Control Kit

human, mouse cDNA and gDNA
very high expression level
RT-CKYD-28S

β -actin Control Kit

human cDNA and gDNA
high expression level
RT-CKYD-ACTB

GAPDH Control kit

human cDNA
high expression level
RT-CKYD-GAPD

β -2-microglobulin Control Kit

human cDNA and gDNA
high expression level
RT-CKYD-B2M

Ubiquitin C Control kit

human cDNA and gDNA
high expression level
RT-CKYD-UBC

Phospholipase A2 Control Kit

human cDNA
medium expression level
RT-CKYD-YWHAZ

Hypoxanthine phosphoribosyltransferase Control Kit

human cDNA
medium expression level
RT-CKYD-HPRT1

Ribosomal protein L13a Control Kit

human cDNA
medium expression level
RT-CKYD-RPL13A

Succinate dehydrogenase complex Control Kit

Human cDNA
medium expression level
RT-CKYD-SDHA

TATA box binding protein Control kit

human cDNA
low expression level
RT-CKYD-TBP

Hydroxymethyl-bilane synthase Control Kit

human cDNA
low expression level
RT-CKYD-HMBS

Further information available through Eurogentec web site, www.eurogentec.com.

- Troubleshooting Guide for qPCR and RTqPCR (under the "Technical Resources / Troubleshooting Guide" section).

- Primers and probe design (please refer to our Troubleshooting Guide).

- "Your One-stop-shop Real-Time qPCR supplier" handbook (under the "Technical Resources / Documentation" section).

- MSDSs, (under the "Technical Resources / MSDS" section)

- Certificates of Analysis (please contact us).

For any further information required please contact our Customer Help Desk:

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