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# GAPDH Control kit Technical Data Sheet

Reference: RT-CKYD-GAPD

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

# Storage conditions

The GAPDH 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 GAPDH control Control kit contains enough reagents for up to 250 -  $50~\mu l$  reactions.

Reagent	Volume	Description
GAPD primer mix (plain cap)	750 µl	One tube of primer mix 10 µM
GAPD probe (brown cap)	375 µl	One tube of 12.5 µM Yakima Yellow®-Eclipse® DarkQuencher probe

The GAPDH 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.

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 GAPD Primer Mix (plain cap) and 1.5 µl of GAPD Probe (brown cap).

If required a mix containing the appropriate amount of both primer and probe can be prepared. Dispense 4.5  $\mu$ l of this mix per 50  $\mu$ l reaction.

Final concentration of primers is 600 nM.

Final concentration of probe is 375 nM.

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

The GAPDH Control Kit has been developed to detect the human GAPDH gene (cDNA only). The obtained amplicon is 86 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 developped control kits that can be used for either cDNA or cDNA and gDNA.

18S rRNA Control Kit

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

23S rRNA Control kit

F.coli

very high expression level

RT-CKFT-23S

28S rRNA Control Kit

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

**ß-actin Control Kit** 

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

GAPDH Control kit

human cDNA

high expression level

RT-CKYD-GAPD

ß-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 gPCR and RTgPCR (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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