

# Hydroxymethyl-bilane synthase Control kit Technical Data Sheet

## **Reference: RT-CKYD-HMBS**

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

## Storage conditions

The Hydroxymethyl-bilane synthase 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 Hydroxymethyl-bilane synthase Control kit contains enough reagents for up to 250 - 50  $\mu l$  reactions.

Reagent	Volume	Description
HMBS primer mix (plain cap)	750 µl	One tube of primer mix 10 $\mu M$
HMBS probe (brown cap)	250 µl	One tube of 12.5 µM Yakima Yellow <sup>®</sup> -Eclipse <sup>®</sup> DarkQuencher probe

Hydroxymethyl-bilane synthase 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<sup>®</sup>-Eclipse<sup>®</sup> DarkQuencher labelled probe detected in channel 2 for multiplex qPCR.

### Procedure

#### We strongly recommend preparation of a reaction mix

Each 50  $\mu$ l reaction requires the addition of 3  $\mu$ l of HMBS Primer Mix (plain cap) and 1  $\mu$ l of HMBS Probe (brown cap).

If required a mix containing the appropriate amount of both primer and probe can be prepared. Dispense 4  $\mu I$  of this mix per 50  $\mu I$  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 Hydroxymethyl-bilane synthase Control Kit has been developed to detect the human Hydroxymethyl-bilane synthase gene (cDNA only). The obtained amplicon is 119 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:**

For Europe: E-mail: info@eurogentec.com Tel: +32 4 372 76 65 For USA: E-mail: info.usa@eurogentec.com Tel: +1 858 793 26 66

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