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# **ß-2** microglobulin Control kit Technical Data Sheet

Reference: RT-CKYD-B2M

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

# Storage conditions

The ß-2 microglobulin 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 &-2 microglobulin Control kit contains enough reagents for up to 250 - 50  $\mu$ l reactions.

Reagent	Volume Description
B2M primer mix (plain cap)	750 $\mu$ l One tube of primer mix 10 $\mu$ M
B2M probe (brown cap)	250 μl One tube of 12.5 μM Yakima Yellow®-Eclipse® DarkQuencher probe

The ß-2 microglobulin 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 B2M Primer Mix (plain cap) and 1 µl of B2M Probe (brown cap).

If required a mix containing the appropriate amount of both primer and probe can be prepared. Dispense 4  $\mu$ l of this mix per 50  $\mu$ l 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 ß-2 microglobulin Control Kit has been developed to detect the human B2M gene (cDNA/ gDNA). The obtained amplicon is 112 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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