

# qPCR BIO Probe Blue Mix

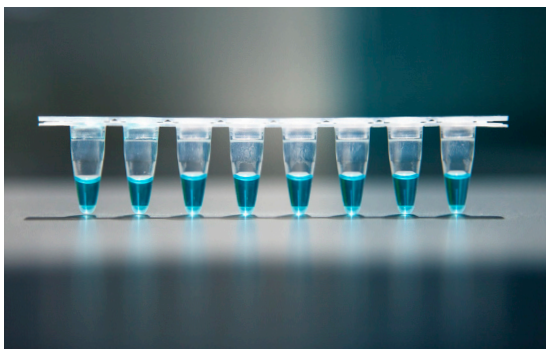
- Easy sample visualisation
- High efficiency in multiplex reactions
- Market-leading sensitivity

## Features

- Non-reactive blue dye for easy visualisation during pipetting
- High efficiency in multiplex reactions
- Rapid extension rate for early Ct values
- Market-leading sensitivity - increased limit of detection
- Compatible on all real-time PCR platforms - standard and fast cycling conditions
- Efficient amplification from GC-rich and AT-rich templates

## Applications

- Absolute quantification
- Relative gene expression analysis
- TaqMan®, Scorpions® and molecular beacon probes
- Low copy number target genes
- Multiplex or singleplex
- Diagnostic real-time PCR



qPCR BIO Probe Blue Mix is a universal probe kit that includes a non-reactive blue dye for easy sample visualisation and enhanced pipetting accuracy. Whether your application is for a singleplex or multiplex expression study or a diagnostic assay, qPCR BIO Probe Blue Mix is the robust choice for all your probe-based real-time PCR needs.

qPCR BIO Probe Blue Mix can be used to quantify any DNA template including genomic, cDNA and viral sequences. Extremely low copy number targets can be detected specifically and with high efficiency. Antibody-mediated hot start technology prevents the formation of primer dimers and non-specific products leading to improved reaction sensitivity and specificity. Combining the latest developments in polymerase technology and advanced buffer chemistry, we offer market-leading performance with minimal or no optimisation and high efficiency in multiplexed reactions.

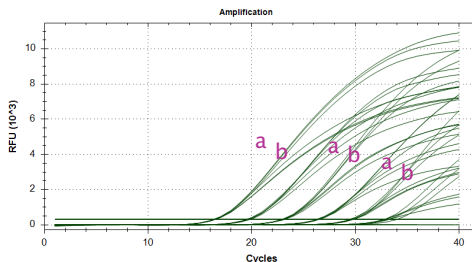


**PCR BIOSYSTEMS**  
simplifying research

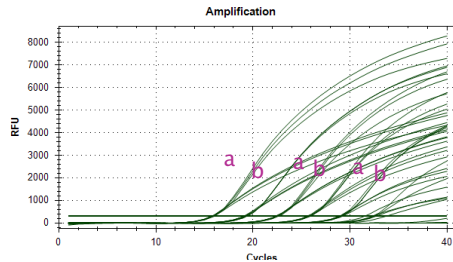


PCRBIOSYSTEMS  
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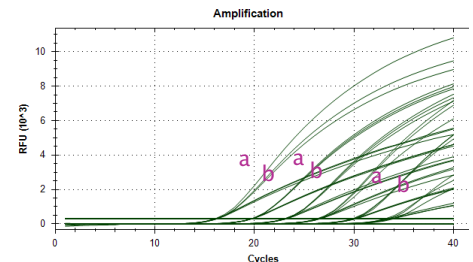
Experiment 1-qPCR BIO Probe Blue Mix  
a=Singleplex b=Quadplex



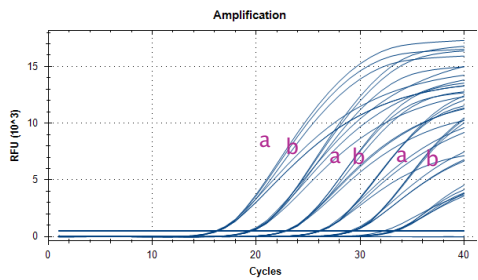
Experiment 2-Invitrogen EXPRESS  
a=Singleplex b=Quadplex



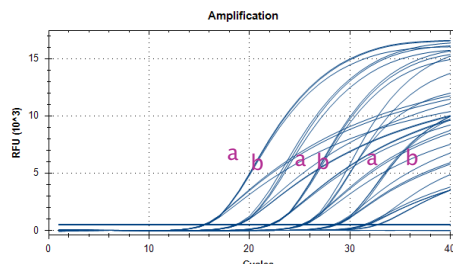
Experiment 3-Biorad Ssofast Probe Mix  
a=Singleplex b=Quadplex



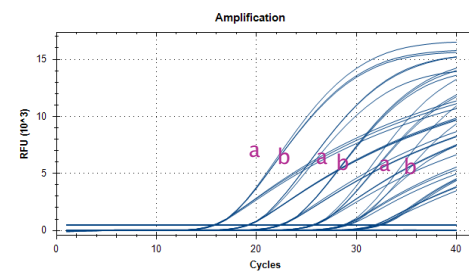
Experiment 4-qPCR BIO Probe Blue Mix  
a=Singleplex b=Quadplex



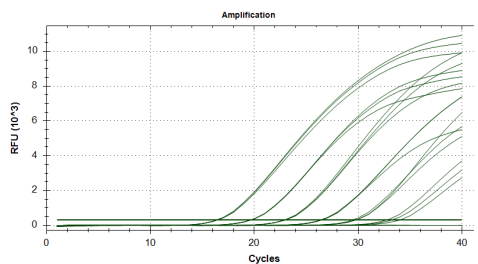
Experiment 5-Invitrogen EXPRESS  
a=Singleplex b=Quadplex



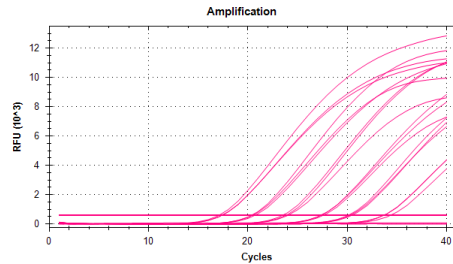
Experiment 6-Biorad Ssofast Probe Mix  
a=Singleplex b=Quadplex



Experiment 7-qPCR BIO Probe Blue Mix  
Singleplex sensitivity test ACVR2B



Experiment 8-qPCR BIO Probe Blue Mix  
Singleplex sensitivity test LIMK1



Experiment 9-qPCR BIO Probe Blue Mix  
Singleplex sensitivity test ACVR1B

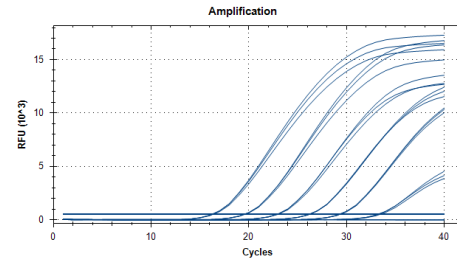


Figure 1.

Experiments 1, 2 and 3 show TaqMan probe amplification traces of human gene ACVR2B in singleplex and in quadplex (ACVR2B, LIMK1, ACVR1B and CDK7) from a cDNA dilution series. a) traces indicate singleplex reactions, b) traces indicate quadplex reactions. qPCR BIO Probe Blue Mix was tested against the latest competitor mixes from Invitrogen (experiment 2) and Biorad (experiment 3). qPCR BIO Probe Blue Mix shows the least PCR inhibition when in multiplex compared to Invitrogen and Biorad mixes. This is evident in more delayed amplification traces in quadplex (b) compared to singleplex (a). Experiments 4, 5 and 6 show TaqMan probe amplification traces of human gene LIMK1 in singleplex and quadplex (ACVR2B, LIMK1, ACVR1B and CDK7). As with experiments 1, 2 and 3, LIMK1 amplification is less inhibited in multiplex in the PCR Biosystems probe mix than the competitor mixes tested. Cycling conditions were 95°C 2min, 40 cycles of 95°C 10sec, 60°C 15sec on Biorad CFX instrument.

Experiments 7, 8 and 9 show TaqMan probe amplification traces from plasmid dilution series of 1x10<sup>6</sup> copies to 10 copies of DNA. For each gene qPCR BIO Probe Blue Mix amplified with 100% efficiency and detected 10 copies of DNA.

Catalogue Number	Product Name	Pack Size	Presentation
PB20.25-01	qPCR BIO Probe Blue Mix Lo-ROX	100 x 20µl rxns	1 x 1ml
PB20.25-05		500 x 20µl rxns	5 x 1ml
PB20.25-20		2000 x 20µl rxns	20 x 1ml
PB20.26-01	qPCR BIO Probe Blue Mix Hi-ROX	100 x 20µl rxns	1 x 1ml
PB20.26-05		500 x 20µl rxns	5 x 1ml
PB20.26-20		2000 x 20µl rxns	20 x 1ml
PB20.27-01	qPCR BIO Probe Blue Mix Separate-ROX	100 x 20µl rxns	[1 x 1ml] & [1 x 200µl ROX]
PB20.27-05		500 x 20µl rxns	[5 x 1ml] & [1 x 200µl ROX]
PB20.27-20		2000 x 20µl rxns	[20 x 1ml] & [4 x 200µl ROX]