GENAXXON bioscience

fon: +49(0)731 – 3608 123
fax: +49(0)731 – 3608 962
E-Mail: info@genaxxon.com

Fast results using Mic qPCR Cycler and Genaxxons realtime 2X Master Mix

Genaxxons 2X Master Mixes:

- Premixed all-in-one 2x HotStart solution for qPCR
- High efficiency for accurate experiments
- Reaction set-up at room temperature
- Pre-assembled reactions stable at room temp. >48 hrs

Fast 2-step protocol

2X Master Mixes without ROX give excellent results using MIC qPCR cycler with a fast 3 or 2-step protocol.

Genaxxons 2X Master Mix without ROX provides fast, reliable and quantifiable qPCR results using the Mic qPCR cycler.

qPCR Setup: Genaxxons 2X Master Mix without ROX, primers for targeting PAH12 (203bp) and 4 concentrations of gDNA (40ng, 20ng, 10ng and 5ng). All DNA concentrations were tested in quadruple replicates. The PCR reaction mix was run on Mic qPCR Cycler with settings according to the Mic PCR protocol or Mic Fast 2-step protocol. Melt curve analysis was performed to test specificity. All results were analyzed using the Mic qPCR Cycler software.

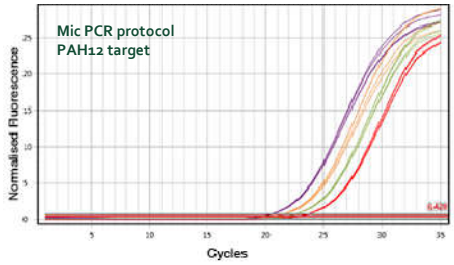
MIC PCR protocol

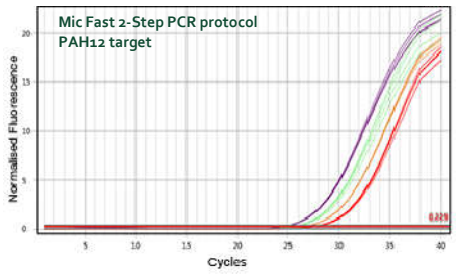
Cycler step	Temperature	Duration	Cycles
Initial heating	95°C	15 min.	1
Denaturation	95°C	20 sec.	
Annealing	60°C	20 sec.	35
Elongation	72°C	20 sec.	
Melt curve analysis	Instrument default settings		1

MIC FAST 2-step PCR protocol

Cycler step	Temperature	Duration	Cycles
Initial heating	95°C	15 min.	1
Denaturation	95°C	5 sec.	40
Elongation	60°C	5 sec.	
Melt curve analysis	Instrument default settings		1

Amplification curves: GreenMasterMix w/o ROX



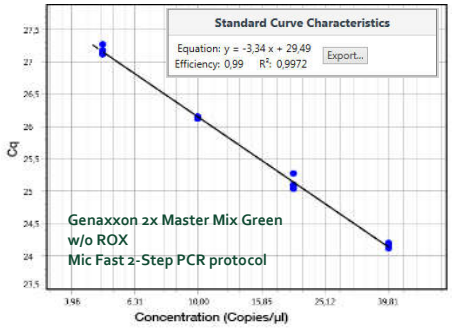


Cq (Ct) values for indicated template DNA concentration ng/sample

MIC PCR protocol	40ng	20ng	10ng	5ng
Cq values	19.70	20.07	21.76	22.80
	19.69	20.07	21.72	22.80
	19.80	20.94	21.87	22.91
	19.79	20.79	21.83	22.91
Average	19.745	20.783	21.795	22.855
SD	0.058	0.113	0.068	0.064

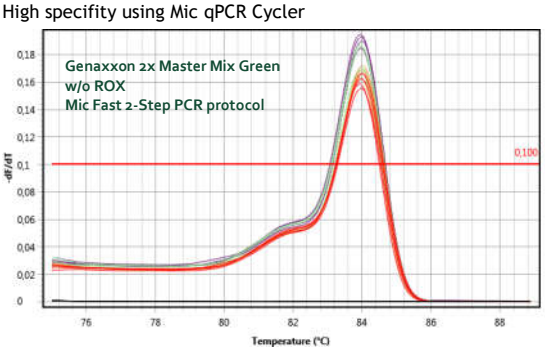
MIC FAST 2-step PCR protocol	40ng	20ng	10ng	5ng
Cq values	24.18	25.03	26.15	27.11
	24.11	25.09	26.12	27.17
	24.19	25.07	26.12	27.27
	24.14	25.27	26.13	27.14
Average	24.16	25.12	26.13	27.17
SD	0.037	0.106	0.014	0.069

High efficiency using MIC qPCR Cycler



The qPCR standard curve showed a strong linear correlation between the C_q values and log [template DNA]. The efficiency calculated from the curve slope is 99%.

High specifity using Mic qPCR Cycler



Melt curve analysis for the amplified pAH12 target. Mic software was used.

GENAXXON bioscience GmbH
Söflinger Str. 70 ● 89077 Ulm ● Geschäftsführer: Dr. Norbert Tröndle
Amtsgericht: 89014 Ulm ● HRB 641623
U.St.-Id.Nr. DE 220 603 767 ● Deutsche St.-Nr. 88002/33658