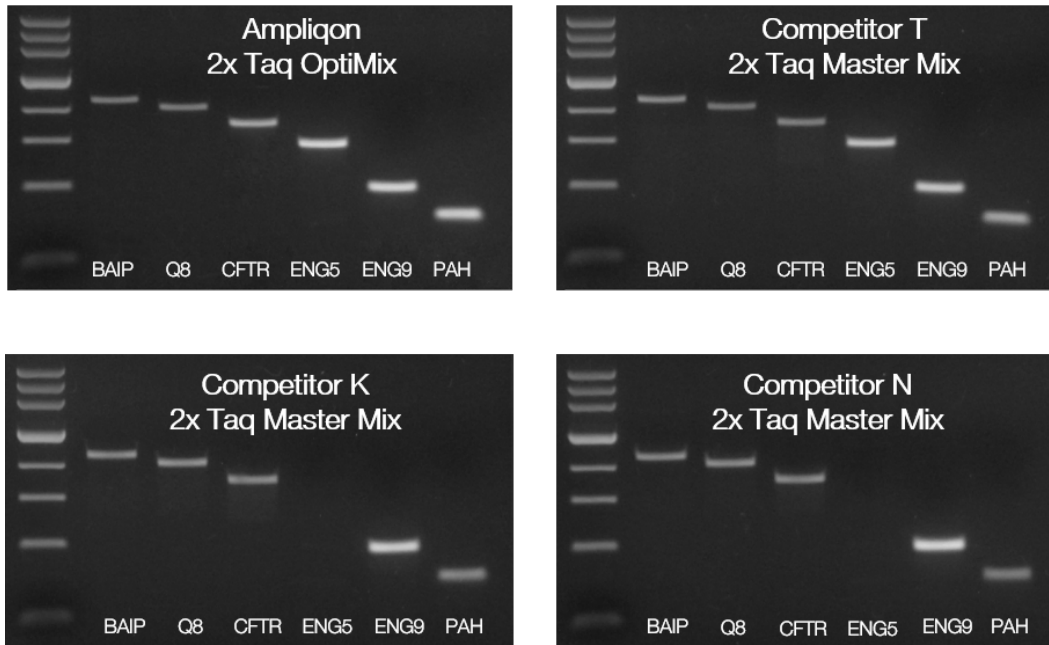


The PCR performance of Taq OptiMix CLEAR was compared to the PCR performance of three equivalent Taq master mixes from leading competitors T, K and N.



PCR Program:

Step	Ampliqon
Initial heating	95 °C, 2 min.
Denaturation	95 °C, 30 sec.
Annealing	60 °C, 30 sec.
Elongation	72 °C, 30 sec.
No. of cycles	30
Final elongation	72 °C, 4 min.

Reaction setup:

Component	Ampliqon	T	K	N
	2X OptiMix CLEAR	2X Master Mix	2X Master Mix	2X Master Mix
Master mix	1x	1x	1x	1x
MgCl ₂	2 mM	1,5 mM	2 mM	1,5 mM
Primers	0,2 µM	0,2 µM	0,2 µM	0,2 µM
gDNA	25 ng	25 ng	25 ng	25 ng

Target informations:

Target	Protein	GC	Length
BAIP	<i>Associated Protein 3</i>	64,6 %	788 bp
Q8	<i>Progesterin and adipoQ receptor</i>	60,25 %	727 bp
CFTR	<i>Cystic fibrosis transmembrane conductance regulator</i>	30,0 %	613 bp
ENG5	<i>Endoglin</i>	68,54 %	480 bp
ENG9	<i>Endoglin</i>	58,36 %	293 bp
PAH 12	<i>Phenylalanine hydroxylase</i>	46,8 %	203 bp

CONCLUSION:

Comparison of Ampliqon Taq OptiMix CLEAR performance with equivalent Taq DNA Polymerase master mixes from three different competitors; T, K or N. Six different primer targets (BAIP, Q8, CFTR, ENG5, ENG9 and PAH) were evaluated. Taq OptiMix CLEAR performed equally well or better on all six primer targets tested in this set up.