DATA SHEET

Jena Bioscience

Ruby Taq Master (2x)

Red master mix for routine PCR and direct gel loading
Ready-to-Use Mixes for PCR

Cat. No.	Amount
PCR-164S	4 x 1,25 ml (2x conc.)
PCR-164L	20 x 1.25 ml (2x conc.)
PCR-164XL	100 ml (2x conc.)

For general laboratory use.

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: Short term storage (up to 3 month) at 4 °C possible.

Shelf Life: 12 months

Form: liquid

Concentration: 2x conc.

Description:
Ruby PCR Master is a 2 x conc. ready-to-use master mix recommended for routine PCR applications (up to 4 kb fragment length), high throughput PCR or genotyping.
It contains all reagents required for PCR (except template and primer) in a well-balanced ratio to ensure high specificity and minimal by-product formation in almost all PCR applications without the need of additional optimization steps.
Ruby PCR Master contains an inherent red dye and gel loading buffer allowing an easy visual control during PCR set-up and the direct loading of the reaction product into the gel.
The mix guarantees robust and reliable amplification results with a minimum of pipetting steps, saves time and reduces the risk of contaminations.
The total PCR assay volume is freely adaptable to individual protocols or the requirements of automated pipetting systems.

Content:

Cat.No.	Master Mix	PCR-grade water	Assays x 50 µl
PCR-164S	4 x 1.25 ml	6 ml	200
PCR-164L	20 x 1.25 ml	2 x 12 ml	1000
PCR-164XL	100 ml	100 ml	4000

2 x concentrated PCR master mix containing Taq polymerase, nucleotides (dATP, dCTP, dGTP, dTTP), KCl, $(NH_4)_2SO_4$, $MgCl_2$, red dye, density reagent, enhancing and stabilizing additives.

Recommended PCR assay:
Before starting, vortex the master mix thoroughly to assure homogeneity.

component	stock. conc.	20 µl assay	50 µl assay	final conc.
Ruby PCR Master	2x	10 µl	25µl	1x
Primer Mix or each primer	10 µM each primer	0.4-0.8 µl	1-2 µl	200-400 nM each primer
Template/ sample DNA		< 10 ng	< 20 ng	
PCR-grade water		fill up to 20 µl	fill up to 50 µl	

Recommended cycling conditions:
Before cycling, vortex PCR tubes or plates to assure homogeneity and

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centrifuge briefly to remove bubbles.

Initial denaturation	95 °C	2 min	1x
Denaturation Annealing[1)] Elongation[2)]	95 °C 50 - 68 °C 72 °C	10 - 20 sec 10 - 20 sec 20 sec - 4 min	25 - 30x

[1)]The annealing temperature depends on the melting temperature of the primers used.
[2)]The elongation time depends on the length of the fragments to be amplified. A time of 1 min/kb is recommended.