MyGo

REAGENTS FOR RESULTS

MyGo Extract and Go PCR Kit

Cat. No. 6242 | 4580

Component	80 Reactions (6242)	400 Reactions (4580)
2x MyGo HS Taq Red Mix	2 x 1.0ml	10 x 1.6ml
5x MyGo Extract and Go Buffer A	1 x 1.6ml	5 x 1.6ml
10x MyGo Extract and Go Buffer B	1 x 800µl	5 x 800µl

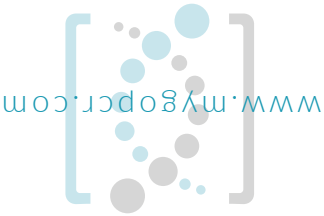
This product is for research use only

1. STORAGE

Store all components at -20°C. If stored correctly the kit will retain full activity for 12 months. The kit can go through up to 30 freeze/thaw cycles with no reduction in performance.

2. TECHNICAL ASSISTANCE

If you have any questions, or experience any difficulties with MyGo Extract and Go PCR Kit, please email reagentsupport@mygopcr.com, providing full details including reaction setup, cycling conditions and screen shots of gel images.



3. DESCRIPTION

MyGo Extract and Go PCR Kit contains all the reagents required for the extraction and amplification of DNA from a variety of tissue types including mouse tail/ear, buccal swab and mammalian blood.

The MyGo Extract and Go Buffer system provides fast and efficient lysis in a single tube, giving high quality PCR-ready DNA in as little as 15 minutes without the need for time-consuming DNA extraction methods.

Extracted DNA is amplified using MyGo HS Taq Red Mix. The mix includes MyGo HS Taq DNA Polymerase in an optimised buffer to give fast, highly specific antibody-mediated hot start PCR. The enzyme is inactive at ambient temperatures, preventing the formation of primer-dimers and mis-primed products with the convenience of room temperature setup. The enzyme is activated at the start of the PCR reaction with a 95°C incubation step.

MyGo HS Taq Red Mix includes a red tracking dye enabling direct loading of PCR products onto agarose gels without the need to add loading buffer.

4. SAMPLE TYPES

Sample	Amount per 100µl extraction	Notes
Mouse tail clip	1 to 2mm (2.5 to 6mg)	
Mouse ear punch	2 to 4mm^2 (2.5 to 6mg)	
Animal tissue	3 to 30mg	
Hair follicle	1-10 individual follicles	
Buccal swab	1 swab	Use 300µl extraction volume for higher yield
Mammalian blood	2 to 8ul Fresh/EDTA blood	2mm2 FTA, FTA elute or Guthrie cards
FFPE tissue	1mm^3 or 2mm^2 of 10µm section	

5. PROTOCOL

5.1 Set up the extraction reaction as follows:

Component	100µl reaction	Notes
Mouse tail clip	1 to 2mm (2.5 to 6mg)	See table above for other samples
5x MyGo Extract and Go Buffer A (1u/µl)	20µl	Lysis buffer
10x MyGo Extract and Go Buffer B	10µl	Protease containing buffer
PCR grade water	70µl	

5.2 Incubate the extraction reaction for lysis, nuclease and protein denaturation followed by heat inactivation:

Cycles	Temperature	Time	Notes
1	75°C	5min	Vortex twice during incubation
1	95°C	5min	Deactivates protease

5.3 Dilute the deactivated reaction by adding 900µl PCR grade water. Centrifuge in a microcentrifuge at high speed for 1 minute to pellet debris. The supernatant can be used immediately in PCR or stored at -20°C.

5.4 Prepare a PCR master mix using the following table:

Component	50µl reaction	Final concentration
2x MyGo HS Taq Red Mix	25.0µl	1x
Forward primer (10µM)	2.0µl	400nM
Reverse primer (10µM)	2.0µl	400nM
Supernatant from 5.3 above	1.0µl to 2.0µl	variable
PCR grade water	Up to 50µl total volume	

5.5 Cycle using the following conditions:

Cycles	Temperature	Time	Notes
1	95°C	1min to 2min	Initial denaturation and enzyme activation Increase to 10 minutes for Colony PCR
40	95°C 55°C to 65°C 72°C	15 seconds 15 seconds 1 to 90 seconds	Denaturation Anneal Extension (15 seconds per kb). For multiplex PCR use 90 seconds

5.6 Analyse the reaction by agarose gel electrophoresis. The reaction includes a red dye for direct loading and tracking without the need to add loading buffer. The dye migration rate in a 2% agarose TAE gel is equivalent to 350bp of DNA. In a 1% agarose TAE gel the dye migration rate is equivalent to 600bp of DNA.