Azura Mouse Genotyping Kit

Catalog No.	Pack Size and Concentration	Kit Components		
AZ-1851	80 reactions	5x Buffer A	10x Buffer B	Azura 2x HS Red Mix
AZ-1855	400 reactions	5x Buffer A	10x Buffer B	Azura 2x HS Red Mix

Azura Mouse Genotyping Kit provides a rapid, low-cost and highly efficient method for the DNA extraction and amplification of a variety of solid tissue types, and is ideally suited to mouse tail snips and mouse ear punches. Conventional methods require laborious, time-consuming and inefficient steps such as phenol extractions and overnight incubations. Azura Mouse Genotyping Kit includes a proprietary lysis buffer formulation which delivers a rapid and complete release of genomic DNA in 15 minutes, followed by PCR amplification using Azura 2x HS Taq Red Mix for unrivalled sensitivity and performance regardless of sequence complexity. Azura 2x HS Taq Red Mix also includes an inert red dye which facilitates direct gel-loading.

- **Exceptional Performance**: Simple, efficient tissue lysis followed by robust amplification which outperforms conventional, crude methods and other commercial kits.
- **Convenience of Minimal Handling**: Single-tube preparation of PCR-ready mouse genomic DNA in 15 minutes provides ease of use and minimizes contamination risk.
- **1 Hour Work-flow**: DNA Extraction and PCR can be complete in as little as 60 minutes for improved throughput and turnaround time.

Storage

Azura Mouse Genotyping Kit is shipped on blue or dry ice and should be stored at –20°C upon receipt.

Starting Material for Efficient Extraction and Amplification

Sample Type	Sample Amount for 100µl Extraction	Important Considerations
Mouse Tail Snips	1mm to 2mm (2.5mg to 6mg)	
Mouse Ear Punch	2mm to 4mm^2 (2.5mg to 6mg)	
Animal Tissue	3mg to 30mg	Excessive tissue will reduce yields
FFPE Tissue	1mm^3 or 2mm^2 of 10µm section	
Hair Follicles	Up to 10 individual follicles	
Mammalian Blood	2µl to 8µl Fresh/EDTA blood	2mm^2 FTA, FTA elute or Guthrie cards
Buccal Swab	1 swab	300µl extraction volume will improve yield

Technical Support

For Trouble-shooting and Technical Guidance, please contact us at tech@azuragenomics.com. This product is intended for research-use only.

1. Prepare the following for efficient lysis:

Component	100µl Reaction	Notes
Mouse Tail Snip	1mm to 2mm	See table above for sample type
5x Buffer A	20 µl	Lysis Buffer
10x Buffer B	10 µl	Protease Buffer
PCR-grade water	70 µl	

2. Incubate the above for lysis and nuclease/protein denaturation followed by heat-inactivation:

Cycles	Temperature & Time	Notes
1	75°C, 5 minutes	Vortex twice during this step
1	95°C, 10 minutes	Deactivates protease

3. Add 900µl PCR-grade water to the deactivated reaction, centrifuge at high speed in a micro-centrifuge for 1 minute to pellet debris, and continue with supernatant in PCR (or store at –20°C). Proceed with a PCR reaction according to the following table:

Component	50 µl Reaction Volume	Final Concentration
Azura 2x HS Taq Red Mix	25 µl	1x
Forward primer (10µM) Reverse primer (10µM)	2.0 µl 2.0 µl	400 nm 400 nm
Supernatant from above	1.0 µl to 2.0 µl	variable
PCR-grade water	Up to 50 µl final volume	
Cycles	**Temperature/Time**	**Notes**
1	95°C, 1 minute to 2 minutes	Denaturation and enzyme activation
25 - 40	95°C, 15 seconds 55°C to 67°C, 15 seconds 72°C, 15 seconds per kb	Denaturation Annealing (determined by user) Use 90 seconds for multiplex PCR

Results can be analyzed using agarose gel electrophoresis. The reaction mix contains an inert red tracking dye which migrates at the rate of a 600bp DNA fragment in 1% agarose TAE gel.