WISENT ADVANCED^{tm} DNA Fast Extract Kit

ORDERING INFORMATION:

Catalogue number	Quantity	Specification
801-201-HR	80 REACTIONS	DNA Extraction
801-201-DR	400 REACTIONS	DNA Extraction

***You will need: 100ml of DNase/RNase-Free water (809-115-EL)

PRODUCT DESCRIPTION:

Advantages:
Rapid, convenient, single-tube DNA extraction
Produces high yield, PCR ready DNA in 15 minutes
Minimised contamination risks and sample loss
Maximised PCR speed, yield and specificity
Ideal for complex templates

Wisent Advanced DNA Fast Extract lysis Kit has been desgined for fast, column-free extraction of PCR-ready DNA from a variety of sample types including animal tissue, hair follicle and mammalian blood. The kit is particularly suited to solid tissue such as mouse tail or mouse ear.

The kit contains a lysis and protease buffer system designed for rapid DNA extraction without the need for laborious and time consuming extraction methods. DNA extraction is performed in a single tube thereby reducing potential contamination and sample loss. Extraction of DNA is rapid, requiring only a 15 minute incubation before the DNA is ready for use directly in your PCR. Alternatively, it can be stored between -30 °C and -15 °C for future use.

The DNA generated with Wisent Advanced DNA Fast Extract lysis Kit is suitable for use in all downstream PCR and qPCR applications without further clean-up steps.

PRODUCT STABILITY AND STORAGE:

On arrival, store at -20°C. Avoid prolonged exposure to light.

If stored correctly the kit will retain full activity for 12 months. It is stable at 4°C for 1 month and can go through 30 freeze/thaw cycles with no loss of activity.

OUR KIT CONTAINS:	**80 rxns**	**400 rxns**
5 x Fast Extract Buffer A	1*1.6ml	5*1.6ml
10 x Fast Extract Buffer B	1*800ul	5*800ul

REACTION SETUP: (Sample amounts)

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

Protocol:

1. Incubate reaction for lysis, nuclease and protein denaturation, followed by heat-inactivation:

Reagent	100ul reaction	Notes
Mouse tail clip	1-2 mm (2.5 to 6 mg)	See table above for other samples
5x Fast Extract Buffer A	20 ul	Lysis buffer
10x Fast Extract Buffer B	10 ul	Protease containing buffer
PCR grade dH_2O	70 ul	

Cycles	Temperature	Time	Notes
1	75°C	5 min	Vortex twice during incubation
1	95°C	10 min	Deactivates protease

2. Add 900ul of PCR grade H_2O to the deactivated reaction. Centrifuge at high speed in a microcentrifuge for 1 minute to pellet debris. Supernatant can be used directly in PCR or stored at -20°C

PCR Reaction setup:

Extracted DNA may be used as a template for PCR or qPCR without further clean-up steps. We recommend 1-2 µL of extract for a 50 µL PCR reaction or 20 µL qPCR reaction. The Wisent PCR and Wisent qPCR range of endpoint and real-time products are recommended for use with this kit.

If contamination from cell extract is a concern, the extracted DNA may be further diluted in water or TE buffer. As DNA concentration and PCR efficiency can vary, users should test a range of dilutions from 10x - 500x to determine the optimal concentration for their PCR.