

Species and tissues tested

Guide for Invitrogen™ Platinum™ Direct PCR Universal Master Mix

Species and/or tissues



Mouse (*Mus musculus*)

- Bone
- Bone marrow
- Brain
- Bulb cells
- Ear
- Hair
- Heart
- Kidney
- Liver
- Spleen
- Tail
- Tooth



Human (*Homo sapiens*)

- Blood
- Buccal swab
- Hair
- HeLa cells
- HeLa S3 cells
- iPSCs
- Jurkat cells
- Nail
- Saliva



Fruit fly (*Drosophila melanogaster*)

- Body (half or whole)
- Head
- Larva



Chinese hamster (*Cricetulus griseus*)

- CHO cells



Chicken (*Gallus gallus*)

- Cartilage
- Feather
- Muscle



Bacteria

- *Escherichia coli*
- *Bacillus subtilis*



Plants

- *Arabidopsis* leaf
- *Arabidopsis* seed
- Birch leaf
- Corn seed
- Lilac leaf
- Linden leaf
- Magnolia leaf
- Maple leaf
- Orchid leaf
- Peanut
- Pine spike
- Rose leaf
- Rose petal
- Spruce spike
- Strawberry
- Strawberry leaf
- Sunflower seed
- *Thuja* spike
- Tobacco leaf
- Tobacco seed
- Wheat leaf
- Wheat root
- Wheat seed
- Wild strawberry leaf



Zebrafish (*Danio rerio*)

- Brain
- Fin
- Muscle
- Scale

Sample size recommendations

Organism	Tissue type	Direct protocol (20 µL)	Lysis protocol (20 µL)
Human	Blood	1–5% of final volume	1–5% of final volume
	Buccal swab	NA	1 swab
	Cells	>100 cells	>100 cells
	Hair	1–3 strands with roots	1–5 strands with roots
	Nail	1 mm	1–3 mm
	Saliva	1 µL	1–2 µL
Mouse	Bone	1 mm piece (ground)	1 mm piece (ground)
	Bone marrow	<0.5 µL*	<1 µL
	Brain	<0.5 mm*	1 mm
	Ear	0.5–1 mm	1 mm
	Heart	<0.5 mm*	1 mm
	Kidney	<0.5 mm*	1 mm
	Liver	<0.5 mm*	1 mm
	Spleen	<0.5 mm*	1 mm
	Tail	0.5 mm	1 mm
Tooth	1 mm piece (ground)	1 mm piece (ground)	
Plants	<i>Arabidopsis</i> seeds	~5–10 seeds	~5–10 seeds
	Large seeds (e.g., sunflower)	1 mm piece	1 mm piece
	Leaves	0.5–1 mm	0.5–2 mm
	Tobacco seeds	3 seeds	1–10 seeds
Bacteria	<i>B. subtilis</i> <i>E. coli</i>	A small portion of a colony, picked up with a pipette tip	
Fruit fly	Body	Whole or half	Whole or half
Zebrafish	Fin	1 mm	1 mm
	Scale	1 mm	1 mm

* The lysis protocol is recommended due to nature of the tissue.

Sample stability in the prepared lysis solution (with proteinase K after heat inactivation) at different temperatures

Sample	Storage condition*	Storage at 2 to 8°C	Storage at –25 to –15°C
Mouse ear	With tissue	3 months	12 months
	Without tissue	12 months	12 months
Mouse tail	With tissue	12 months	12 months
	Without tissue	12 months	12 months
Mouse liver	With tissue	12 months	12 months
	Without tissue	12 months	12 months
Tobacco leaf	With tissue	12 months	12 months
	Without tissue	12 months	12 months
Tobacco seed	With tissue	12 months	12 months
	Without tissue	6 months	9 months

* With tissue: the tissue was kept in the lysis solution during storage. Without tissue: the tissue was removed after the heat inactivation step before storage.

Find out more at thermofisher.com/platinum-direct-pcr

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