PacBi

Overview – PacBio[®] Nanobind[®] PanDNA HMW DNA extraction protocols

For example yield results, see the PanDNA kit brochure and guide & overview.

Sample type	Starting material	Samples input	Workflow time	Procedure & checklist
Blood	Human whole blood	200 µL	~1 hr.	Extracting HMW DNA from human whole blood (<u>102-573-500</u>)
	Nucleated red blood cells (nRBCs)	2.5–20 µL	~1 hr.	Extracting HMW DNA from nucleated red blood cells (<u>102-574-000</u>)
	Human whole blood with RBC lysis	400 µL	<1.5 hrs.	Extracting HMW DNA from human whole blood with RBC lysis (<u>103-377-500</u>)
Animal tissue	Diverse tissue types	2-100 mg	~2.5 hrs.	Extracting HMW DNA from animal tissue (<u>102-574-600</u>)
Insect tissue	Insect whole body or segment	>20 mg	~2.5 hrs.	Extracting HMW DNA extraction from insects (<u>102-377-400</u>)
Plant tissue	Isolated plant nuclei	0.25-5g	~1.5 hrs.1	Extracting HMW DNA from plant nuclei (<u>103-378-200</u>)
Mammalian cultured cells	Suspension cell culture	1 x 10 ⁶ –5 x 10 ⁶ diploid human cells	~1 hr.	Extracting HMW DNA from cultured suspension cells (<u>103-394-500</u>)
	Adherent cell culture	1 x 10 ⁶ –5 x 10 ⁶ diploid human cells	~1 hr.	Extracting HMW DNA from cultured adherent cells (<u>102-573-600</u>)
Cultured bacteria	Gram-negative bacteria	5×10^{9} – 5×10^{9} bacterial cells	~1 hr.	Extracting HMW DNA from Gram-negative bacteria (<u>102-573-800</u>)
	Gram-positive bacteria	5 x 10 ⁸ -5 x 10 ⁹ bacterial cells	~1 hr.	Extracting HMW DNA from Gram-positive bacteria (<u>102-573-900</u>)

¹Upstream plant nuclei prep isolation procedures (e.g., <u>102-574-900</u> or <u>102-574-800</u>) typically take ~3 hours to complete.

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