PacBi PacBi PacBi PacBi Nanobind HMW DNA extraction overview

	Standard procedures — Cells, bacteria and blood Compatible kit: Nanobind CBB or Nanobind tissue kit						Standard procedures – Plant Compatible kit: Nanobind plant nuclei kit			Standard procedures – Tissue samples Compatible kit: Nanobind tissue kit	
Sample type	Cultured cells	Gram-negative ba	acteria Gram-posit	ive bacteria Ma	ammalian blood	Nucleated blood	Plant tissue (TissueRuptor)	Plant tissu Grindir	`	animal tissue TissueRuptor)	Animal tissue (Dounce homogenizer)
Input amount	1x10 ⁶ - 5x10 ⁶ cells	5x10 ⁸ - 5x10 ⁹ bad cells	cterial 5x10 ⁸ - 5x1 ce		200 μL	5-30 μL	1-4 g	1-5		25 mg	25 mg
Procedure	Procedure & checklist - Extracting HMW DNA from cultured cells using Nanobind kits	from Crom nog	DNA Extracting from Gran	HMW DNA n-positive ng Nanobind	edure & checklist – acting HMW DNA mammalian whole using Nanobind kits	Procedure & checklist – Extracting HMW DNA from nucleated blood using Nanobind kits	Procedure & check Isolating nuclei from tissue using TissueF disruption followed by Procedure & check Extracting HMV DNA from plant nu using Nanobind F	Ruptor Isolating nuclei Ruptor tissue usir disrupt follower list - Procedure & c V Extracting uclei DNA from pla	from plant ig LN2 ion d by hecklist – HMW ant nuclei	dure & checklist – tracting HMW rom animal tissue ng TissueRuptor	Procedure & checklist – Extracting HMW DNA from standard Dounce homogenizer tissue using Nanobind kits
Description	Standard HMW DNA extraction from cultured cells	Standard HMW d extraction from co Gram-negative ba	extraction fr ultured Gram-posit	om cultured	ndard HMW DNA extraction from imalian blood (e.g., human)	Standard HMW DNA extraction from nucleated blood (e.g., fish, birds, and reptiles)	1 133uCrtuptor 1 C3u	ant extraction fr tissues usi grinding. LN2 Its in recommended ields plants and ind is challenging pla	om plant extraction LN2 tigrinding is for fibrous some & over ant species extraction ext	ation table in Guide view document for	Standard HMW DNA extraction from animal tissues using Dounce homogenizer. See Sample information table in Guide & overview document for specific tissue disruption recommendations.
	Example procedures established with specific sample types										
	Compatible kit: Nanobind tissue kit										
Sample type	cryoPREP tissue homogenization	Aplysia	Snail	Crab	Various fish tissue	s Fish testis	Fish skeletal muscle	Human breast	Mammalian brain	Mammalian liver	Mammalian spleen
Input amount	25 mg	25 mg	100 mg	100 mg	25 mg	25 mg	50 mg	20 mg	22 mg	23 mg	19 mg
Procedure	Procedure & checklist - Homogenizing tissue using cryoPREP	Procedure & checklist – Extracting HMW DNA from Aplysia tissue using Nanobind kits	Procedure & checklist – Extracting HMW DNA from black mystery snail tissue using Nanobind kits	Procedure & checklist – Extracting HMW DNA from crab muscle using Nanobind kits	Procedure & checklist - Selectir fish tissue type fo sequencing		Procedure & checklist – Extracting HMW DNA from fish skeletal muscle using Nanobind kits	Procedure & checklist – Extracting HMW DNA from human breast tissue using Nanobind kits	Procedure & checklist – Extracting HMW DNA from mammalian brain tissue using Nanobind kits	Procedure & checklist – Extracting HMW DNA from mammalian live using Nanobind ki	DNA from mammalian spleen
Description	Example describing tissue disruption using Covaris cryoPREP instrument	Example describing HMW DNA extraction from aplysia tissues	Example describing HMW DNA extraction from snail tissue	Example describing HMW DNA extraction from crab muscle	Data comparing HMW DNA from a variety of fish tissu types		Example describing HMW DNA extraction from fish skeletal muscle	Example describing HMW DNA extraction from fibrous human breast	Example describing HMW DNA extraction from mammalian brain	Example describir HMW DNA extraction from mammalian live	HMW DNA extraction from

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For general kit information: Guide & overview - Nanobind CBB kit; Guide & overview - Nanobind tissue kit; Guide & overview - Nanobind plant nuclei kit

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