

Issuing date: 20Jul22

Revision date: 20Jul22

Rev. 01

SDS PN: 102-338-500

1. Product and company identification				
1.1 Product identifier				
Product name	Nanobind tissue kit 4C			
Product number(s)	102-208-100			
Other means of identification	This product is a pouch containing 1 tube and 1 bottle.			
	<i>Subcomponent name</i>	<i>Part #</i>	<i>#</i>	<i>Cap color</i>
	RNase A	102-278-800	1	blue
	Buffer CT	102-280-300	1	clear
1.2 Relevant identified uses of the substance or mixture and uses advised against				
Identified use	This kit is used with Nanobind tissue kit RT (102-209-000) to complete HMW DNA extraction from animal tissues (24 reactions).			
Restrictions on use	Research use only.			
1.3 Details of the supplier of the substance or mixture				
Supplier name and address	Pacific Biosciences of California, Inc. 1305 O'Brien Drive Menlo Park, CA 94025 USA https://www.pacb.com			
Supplier phone	+1.650.521.8000			
1.4 Emergency telephone number				
Within USA and Canada	Call CHEMTREC 1-800-424-9300 (reference CCN# 656805)			
Outside USA and Canada	techsupport@pacb.com			
2. Hazard(s) identification				
2.1 Classification of the substance or mixture				
The kit contains hazardous substances. ¹ Each component is classified as follows.				
RNase A	102-278-800	Not a hazardous substance.		
Buffer CT	102-280-300	Acute aquatic toxicity (category 3), Chronic aquatic toxicity (category 3).		
2.2 GHS label elements and precautionary statements				
Information is provided for the hazardous components listed in section 2.1				
<i>Component</i>	<i>Pictogram</i>	<i>Signal word</i>	<i>Hazard statement(s)</i>	<i>Precautionary statement(s)</i>
Buffer CT	None	None	<ul style="list-style-type: none"> Harmful to aquatic life Harmful to aquatic life with long lasting effects 	<ul style="list-style-type: none"> Avoid release to the environment. Dispose of contents and container in accordance with local regulations.
2.3 Hazards not otherwise classified (HNOC) or not covered by GHS				
RNase A contains bovine pancreas derived material. Country of origin Australia/New Zealand. Certificate of origin available upon request.				

¹ Classification in accordance with 29CFR1910 (OSHA HCS) and UN Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

3. Composition / information on ingredients				
3.1 Substances				
Common name and synonyms			Nanobind tissue kit 4C	
Cas number			None	
Other unique identifiers			None	
3.2 Hazardous components				
The following hazardous ingredients are present.				
<i>Component</i>	<i>Hazardous ingredient(s)</i>	<i>CAS</i>	<i>GHS classification</i>	<i>Concentration (wt%)</i>
Buffer CT	Trade secret	Trade secret	Acute Toxicity, oral (category 4), Skin irritation (category 2), Serious eye damage (category 1), Acute aquatic toxicity (category 1), Chronic aquatic toxicity (category 1)	0.5%
4. First aid measures				
4.1 Description of first aid measures				
General advice		Consult a physician. Show this safety data sheet to the physician.		
If inhaled		If breathed in, move person into fresh air. If not breathing, give artificial respiration.		
In case of skin contact		Wash off with water.		
In case of eye contact		Flush eyes with water.		
If swallowed		Never give anything by mouth to an unconscious person. Rinse mouth with water.		
4.2 Most important symptoms/effects, both acute and delayed				
No data available. Refer to section 2.2 and section 11 for additional information.				
4.2 Indication of any immediate medical attention and special treatment needed				
No data available				
5. Fire-fighting measures				
5.1 Suitable extinguishing media				
Dry chemical, carbon dioxide, foam, or water.				
5.2 Special hazards arising from the substance or mixture				
Combustion will produce oxides of carbon and nitrogen.				
5.3 Advice for firefighters (special protective equipment or precautions)				
Wear self-contained breathing apparatus for fire-fighting as necessary.				
6. Accidental release measures				
6.1 Personal precautions, protective equipment and emergency procedures				
Avoid breathing vapors, mists, or gas. For personal protection see section 8.0.				
6.2 Environmental precautions				
Avoid release to the environment. Report spills and releases as required to appropriate authorities.				
6.3 Methods and materials for cleanup				
Wear personal protective equipment, wipe up with paper towel (or similar), and contain in closed containers.				
6.4 Reference to other sections				
For disposal see section 13.				
7. Handling and storage				
7.1 Precautions for safe handling				
Utilize standard good lab practices. Use in a well-ventilated area and wear standard PPE.				
7.2 Conditions for safe storage, including any incompatibilities				
Keep containers tightly closed at the recommended storage temperature.				

8. Exposure controls / personal protection	
8.1 Control parameters	
Contains no substances with occupational exposure limit values.	
8.2 Exposure controls	
Appropriate engineering controls:	
General industrial hygiene practice. No special ventilation required for normal use.	
Personal protective equipment (PPE):	
Eye/face protection	Safety glasses
Skin and body protection	Latex or nitrile gloves; lab coat /apron
Respiratory protection	None required
9. Physical and chemical properties	
9.1 Information on basic physical and chemical properties	
Appearance	Each reagent tube/bottle contains clear colorless liquid.
Odor	No odor
Odor threshold	No data available
pH	RNase A: 7.5; Buffer CT: 9.0
Melting point/freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limit	No data available
Vapor pressure	No data available
Relative density	No data available
Solubility(ies)	No data available
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
10. Stability and reactivity	
Reactivity	This product is not reactive under normal conditions of storage and use.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available
Conditions to avoid	No data available
Incompatible materials	Avoid contact with strong acids, bases and oxidizers.
Hazardous decomposition products	No data available. In the event of fire see section 5.
11. Toxicological information	
11.1 Information on likely routes of exposure	
The most likely route of exposure is via skin or eye contact. Exposure via inhalation or ingestion is less likely.	
11.2 Symptoms related to the physical, chemical and toxicological characteristics	
No data available	
11.3 Delayed and immediate effects and also chronic effects from short-and long-term exposure	
Eyes	No data available
Skin	No data available

Inhalation	No data available
Ingestion	No data available
Chronic effects	No data available
Aggravated medical conditions	No data available
Interactions with other chemicals	No data available
11.4 Numerical measures of toxicity	
Acute toxicity	No data available
Skin corrosion/irritation	No data available
Serious eye damage/irritation	No data available
Respiratory or skin sensitization	No data available
Germ cell mutagenicity	No data available
Reproductive toxicity	No data available
Specific target organ toxicity	No data available
11.5 Carcinogenicity	
No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP or OSHA.	
12. Ecological information	
Ecotoxicity	No data available
Persistence and degradability	No data available
Bioaccumulative potential	No data available
Mobility in soil	No data available
Results of PBT and vPvB assessment	None Required
Other adverse effects	No data available
13. Disposal considerations	
Dispose all waste in accordance with local, regional and national regulations.	
Product	See above
Contaminated packaging	See above
US EPA waste number	No EPA waste numbers apply. Not regulated as a US federal hazardous waste. May be regulated under individual state laws.
14. Transport information	
Transportation of this product is not regulated under ICAO, IMDG or US DOT.	
15. Regulatory information	
15.1 USA federal regulations	
SARA 302	No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
SARA 313	This material does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.
SARA 311/312	No SARA hazards
TSCA	Research use only
15.2 USA state regulations	
CA Prop 65	This kit does not contain any chemicals known to the state of California to cause cancer or adverse reproductive health effects.

16. Other information	
Prepared by	Pacific Biosciences of California, Inc. Environment, Health and Safety 1305 O'Brien Drive Menlo Park, CA 94025 USA safety@pacb.com
Further information	<p>The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. It is not a warranty or quality specification. This information relates only to the specific material designated and may not be valid for use in combination with any other material or in any other process.</p> <p>Research use only. Not for use in diagnostic procedures. ©2022, Pacific Biosciences of California, Inc. ("PacBio"). All rights reserved. Information in this document is subject to change without notice. PacBio assumes no responsibility for any errors or omissions in this document. Certain notices, terms, conditions and/or use restrictions may pertain to your use of PacBio products and/or third party products. Refer to the applicable PacBio terms and conditions of sale and to the applicable license terms at pacb.com/license. Pacific Biosciences, the PacBio logo, PacBio, Circulomics, Omniome, SMRT, SMRTbell, Iso-Seq, Sequel, Nanobind, and SBB are trademarks of PacBio. All other trademarks are the sole property of their respective owners.</p>