

Issuing date: 29SEP23

Revision date: 27OCT23

Rev. 02

SDS PN: 103-230-300

1. Product and company identification				
1.1 Product identifier				
Product name	Kinnex™ single-cell concatenation kit			
Product number(s)	103-242-000			
Other means of identification	This product is a box containing 32 tubes.			
	<i>Subcomponent name</i>	<i>Part #</i>	<i>#</i>	<i>Cap color</i>
	Kinnex single-cell PCR mix	103-244-500	2	green
	Kinnex primer mix A	103-107-800	1	orange
	Kinnex primer mix B	103-107-900	1	orange
	Kinnex primer mix C	103-108-000	1	orange
	Kinnex primer mix D	103-108-100	1	orange
	Kinnex primer mix E	103-108-200	1	orange
	Kinnex primer mix F	103-108-300	1	orange
	Kinnex primer mix G	103-108-400	1	orange
	Kinnex primer mix H	103-153-000	1	orange
	Kinnex primer mix I	103-153-100	1	orange
	Kinnex primer mix J	103-153-200	1	orange
	Kinnex primer mix K	103-153-300	1	orange
	Kinnex primer mix L	103-153-400	1	orange
	Kinnex primer mix M	103-153-500	1	orange
	Kinnex primer mix N	103-153-600	1	orange
	Kinnex primer mix O	103-153-700	1	orange
	Kinnex primer mix PQ	103-153-800	1	orange
	Kinnex 3' capture primer mix	103-182-400	1	yellow
	Kinnex 5' capture primer mix	103-182-200	1	red
	Kinnex single-cell ligase	103-244-000	1	yellow
	Kinnex single-cell enzyme	103-243-800	1	light green
	Kinnex single-cell ligase buffer	103-244-100	1	white
	Repair buffer	102-244-300	1	purple
	Kinnex single-cell ligation additive	103-244-400	1	red
	Kinnex adapter bc01 mix	103-109-600	1	blue
	Kinnex adapter bc02 mix	103-109-700	1	blue
	Kinnex adapter bc03 mix	103-109-800	1	blue
	Kinnex adapter bc04 mix	103-109-900	1	blue
	DNA Repair Mix	103-110-000	1	green
	Nuclease Buffer	103-110-200	1	light purple
	Nuclease Mix	103-110-100	1	light green


1.2 Relevant identified uses of the substance or mixture and uses advised against		
Identified use	The Kinnex single-cell concatenation kit contains reagents and oligos to create concatenated barcoded Kinnex libraries for 10x 3' or 5' single-cell cDNA.	
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 or mixtures. ¹ Subcomponents are classified as follows.		
<i>Subcomponent name</i>	<i>Part #</i>	<i>Classification</i>
Kinnex single-cell PCR mix	103-244-500	Acute toxicity, oral (Category 5); Skin irritant (Category 3), Single target organ toxicity, single exposure (Category 1)
Kinnex primer mix A	103-107-800	Not a hazardous substance or mixture.
Kinnex primer mix B	103-107-900	Not a hazardous substance or mixture.
Kinnex primer mix C	103-108-000	Not a hazardous substance or mixture.
Kinnex primer mix D	103-108-100	Not a hazardous substance or mixture.
Kinnex primer mix E	103-108-200	Not a hazardous substance or mixture.
Kinnex primer mix F	103-108-300	Not a hazardous substance or mixture.
Kinnex primer mix G	103-108-400	Not a hazardous substance or mixture.
Kinnex primer mix H	103-153-000	Not a hazardous substance or mixture.
Kinnex primer mix I	103-153-100	Not a hazardous substance or mixture.
Kinnex primer mix J	103-153-200	Not a hazardous substance or mixture.
Kinnex primer mix K	103-153-300	Not a hazardous substance or mixture.
Kinnex primer mix L	103-153-400	Not a hazardous substance or mixture.
Kinnex primer mix M	103-153-500	Not a hazardous substance or mixture.
Kinnex primer mix N	103-153-600	Not a hazardous substance or mixture.
Kinnex primer mix O	103-153-700	Not a hazardous substance or mixture.
Kinnex primer mix PQ	103-153-800	Not a hazardous substance or mixture.
Kinnex 3' capture primer mix	103-182-400	Not a hazardous substance or mixture.
Kinnex 5' capture primer mix	103-182-200	Not a hazardous substance or mixture.
Kinnex single-cell ligase	103-244-000	Acute aquatic toxicity (category 3), Chronic aquatic toxicity (category 3).
Kinnex single-cell enzyme	103-243-800	Not a hazardous substance or mixture.
Kinnex single-cell ligase buffer	103-244-100	Acute aquatic toxicity (category 3), Chronic aquatic toxicity (category 3).

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

Repair buffer	102-244-300	Not a hazardous substance or mixture.
Kinnex single-cell ligation additive	103-244-400	Not a hazardous substance or mixture.
Kinnex adapter bc01 mix	103-109-600	Not a hazardous substance or mixture.
Kinnex adapter bc02 mix	103-109-700	Not a hazardous substance or mixture.
Kinnex adapter bc03 mix	103-109-800	Not a hazardous substance or mixture.
Kinnex adapter bc04 mix	103-109-900	Not a hazardous substance or mixture.
DNA Repair Mix	103-110-000	Not a hazardous substance or mixture.
Nuclease Buffer	103-110-200	Not a hazardous substance or mixture.
Nuclease Mix	103-110-100	Not a hazardous substance or mixture.

2.2 GHS label elements and precautionary statements

Information is provided for the hazardous components listed in section 2.1.

<i>Product</i>	<i>Pictogram</i>	<i>Signal word</i>	<i>Hazard statement(s)</i>	<i>Precautionary statement(s)</i>
Kinnex single-cell PCR mix		Danger	<ul style="list-style-type: none"> • May be harmful if swallowed. • Causes mild skin irritation. • Causes damage to organs, central nervous system, oral route 	<ul style="list-style-type: none"> • Do not eat, drink, or smoke when using the product. • Do not breath mist, vapors, or spray. • Wash skin thoroughly after handling. • If swallowed: Get medical help. • If skin irritation occurs: Get medical help. • If exposed or concerned: Get emergency medical help immediately. • Store locked up. • Dispose of contents/container in accordance with local regulations.
Kinnex single-cell ligase	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/container in accordance with local regulations.
Kinnex single-cell ligase buffer	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/container in accordance with local regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

The MAS enzyme, Nuclease mix and Nuclease buffer contains bovine derived material. Certificate of origin available upon request. The DNA repair mix contains materials derived from e.coli.

3. Composition / information on ingredients

3.1 Substances

Common name and synonyms	Kinnex single-cell concatenation kit
Cas number	None
Other unique identifiers	None

3.2 Hazardous components

The Kinnex single-cell PCR mix, single-cell ligase and single cell ligase buffer contains the following hazardous ingredients. The other reagent tubes do not contain hazardous ingredients

<i>Product</i>	<i>Hazardous Ingredient(s)</i>	<i>CAS</i>	<i>GHS Classification</i>	<i>Concentration (wt%)</i>
Kinnex single-cell PCR mix	Tetramethylammonium chloride	75-57-0	Acute toxicity, oral (Category 2); Acute toxicity, dermal (Category 3); Skin irritation (Category 2); Specific target organ toxicity – single exposure, oral (Category 1), central nervous system; Chronic aquatic toxicity (Category 2)	1 - < 2.5 %

Kinnex single-cell ligase	Triton™ X-100	9036-19-5	Acute toxicity, oral (category 4); Skin irritation (category 2); Serious eye damage (category 1); Acute aquatic toxicity (category 1); Chronic aquatic toxicity (category 1)	0.1%
Kinnex single-cell ligase buffer	Triton™ X-100	9036-19-5	Acute toxicity, oral (category 4); Skin irritation (category 2); Serious eye damage (category 1); Acute aquatic toxicity (category 1); Chronic aquatic toxicity (category 1)	0.1%
4. First aid measures				
4.1 Description of first aid measures				
General advice	Consult a physician. Show this safety data sheet to the physician. Follow the general practices listed for all components and specific practices as noted. <ul style="list-style-type: none"> Kinnex single-cell PCR Mix: If exposed or concerned: Get emergency medical help immediately. 			
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. <ul style="list-style-type: none"> Kinnex single-cell PCR Mix: If skin irritation occurs, get medical help. 			
In case of eye contact	Flush eyes with water.			
If swallowed	Never give anything by mouth to an unconscious person. Rinse mouth with water. <ul style="list-style-type: none"> Kinnex single-cell PCR Mix: If swallowed, get medical help. 			
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 firefighting as necessary.				
6. Accidental release measures				
6.1 Personal precautions, protective equipment and emergency procedures				
Avoid breathing vapors, mist, 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. In addition to the general practices, follow specific practices as noted. <ul style="list-style-type: none"> Kinnex single-cell PCR mix: Do not eat, drink, or smoke when using the product. Do not breath mist, vapors, or spray. Wash skin thoroughly after handling 				
7.2 Conditions for safe storage, including any incompatibilities				
Keep containers tightly closed at the recommended storage temperature. <ul style="list-style-type: none"> Kinnex single-cell PCR mix: Store locked up 				

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	All tubes contain clear colorless liquids.
Odor	No odor
Odor threshold	No data available
pH	7.0-8.5
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 (RCRA, federal) waste codes	No EPA ID number. Not regulated as a US federal hazardous waste.
State waste codes	Check your state regulations to determine applicable waste codes.
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	The following reagents have the SARA hazards listed. Other components have no SARA hazards. <ul style="list-style-type: none"> • Kinnex single-cell PCR Mix: Specific target organ toxicity (single exposure)
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. ©2023, 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, SBB, Revio, Onso, Apton and Kinnex are trademarks of PacBio.</p>