MICRONBRANE MEDICAL

Rm. A212, 2F., No. 2, Sec. 2, Shengyi Rd.,
Zhubei City, Hsinchu County 302058, Taiwan

Safety Data Sheet

Unison Ultralow DNA NGS Library Preparation Kit

REF NLK-01-008, NLK-01-048 For Research Use Only

1. PRODUCT AND COMPANY IDENTIFICATION

REF: NLK-01-008, NLK-01-048

Product name: Unison Ultralow DNA NGS Library Preparation Kit

Components: Transposase Mix
5x Reaction buffer
5x Stop buffer
Amplification Mix

Company: Micronbrane Medical Co., Ltd

Address: A212, 2F., No. 2, Sec. 2, Shengyi Rd., Zhubei City, Hsinchu County 302058, Taiwan

Phone: +886 3 667 3123

Fax +886 3 667 3593

E-mail: support@micronbrane.com

The Unison Ultralow DNA NGS Library Preparation Kit is part of Micronbrane Medical's Pathogen Real-Time Identification by Sequencing (PaRTI-Seq™) metagenomic Next-Generation Sequencing (mNGS) assay. When used together, PaRTI-Seq delivers accurate, reliable and comprehensive pathogen identification from any liquid biopsy within 24 hours.

Unison generates libraries from low DNA extracts while accelerating the workflow by condensing fragmentation, adapter ligation, and normalization into a single step. The kit is also specifically optimized for high molecular weight DNA and generates library fragments whose sizes are optimal for Illumina platforms at normalized concentrations.

The entire PaRTI-Seq workflow enables multiplexing of each sequencing run thereby reducing the sequencing depth required to achieve a representative microbiome sample, sequencing costs and shortens the overall turnaround time.

*This kit is for **Research Use Only.***

2 HAZARD IDENTIFICATION

OSHA Hazards

- *No known OSHA hazards.*

HMIS Classification

- *Health hazard: 0*
- *Flammability: 0*
- *Physical hazards: 0*

NFPA Rating

- *Health hazard: 0*
- *Fire: 0*
- *Reactivity Hazard: 0*

Potential Health Effects

- *Inhalation May be harmful if inhaled. May cause respiratory tract irritation.*
- *Skin May be harmful if absorbed through skin. May cause skin irritation.*
- *Eyes cause eye irritation.*
- *Ingestion May be harmful if swallowed.*

3 INFORMATION ON INGREDIENTS

This product does not contain hazardous chemicals at concentrations of 1% or greater.

4 FIRST AID MEASURES

If inhaled

- *Move the person into fresh air. If not breathing, give artificial respiration.*

In case of skin contact

- *Wash off with soap and plenty of water.*

In case of eye contact

- *Flush eyes with water as a precaution.*

If swallowed

- *Never give anything by mouth to an unconscious person. Rinse mouth with water.*

5 FIRE-FIGHTING MEASURES

Conditions of flammability

- *Not flammable or combustible.*

Suitable extinguishing media

- *Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.*

Special protective equipment for firefighters

- *Wear self contained breathing apparatus for fire fighting if necessary.*

Hazardous combustion products

- *Hazardous decomposition products formed under fire conditions. – Carbon oxides, nitrogen.*

6 ACCIDENTAL RELEASE MEASURES

Personal precautions

- *Avoid dust formation. Avoid breathing vapors, mist or gas.*

Environmental precautions

- *Do not let products enter drains.*

Methods and materials for containment and cleaning up

- *Sweep up and shovel. Keep in suitable, closed containers for disposal.*

7 HANDLING AND STORAGE

Precautions for safe handling

- *Provide appropriate exhaust ventilation at places where dust is formed.*

Conditions for safe storage

- *Keep containers tightly closed in a dry and well-ventilated place.*
- *Recommended storage temperature: -20°C.*
- *Keep in a dry place.*

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

1. Respiratory protection
   - *Respiratory protection is not required.*
2. Hand protection
   - *Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal.*
3. Eye protection
   - *Use equipment for eye protection tested and approved under appropriate government.*
4. Skin and body protection
   - *Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.*
5. Hygiene measures
   - *General industrial hygiene practice.*

9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

1. ***Form:*** *liquid*
2. ***Color:*** *colorless*
3. ***pH:*** *7.5-8.5*
4. ***Melting point/freezing point:*** *no data available*
5. ***Boiling point:*** *100°C*
6. ***Flash point:*** *no data available*
7. ***Ignition temperature:*** *no data available*
8. ***Auto-ignition temperature:*** *no data available*
9. ***Lower explosion limit:*** *no data available*
9. ***Upper explosion limit:*** *no data available*
10. ***Vapor pressure:*** *no data available*
11. ***Density:*** *no data available*
12. ***Water solubility:*** *100% soluble*
13. ***Relative vapor density:*** *no data available*
14. ***Odor:*** *no data available*
15. ***Odor Threshold:*** *no data available*
16. ***Evaporation rate:*** *no data available*

10 STABILITY AND REACTIVITY

Chemical stability

- *Stable under recommended storage conditions*

Possibility of hazardous reactions

- *No data available*

Conditions to avoid

- *Heating (decomposition)*

Materials to avoid

- *Strong acids, Strong bases*

Hazardous decomposition products

- *Other decomposition products - no data available*
- *Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen*

11 TOXICOLOGICAL INFORMATION

- *None available.*

12 ECOLOGICAL INFORMATION

- *None available.*

13 DISPOSAL CONSIDERATIONS

Product

- *Waste material must be disposed of in accordance with the national and local regulations.*

14 TRANSPORT INFORMATION

Road / Railway Haulage ADR/RID

- *Non-hazardous for road / rail transport.*

Sea Freight IMO (IMDG)

- *Non-hazardous for sea freight.*

Air Freight IATA (ICAO)

- *Non-hazardous for air transport*

UN Number

- *Not restricted.*

15 REGULATORY INFORMATION

CWA (Clean Water Act)

- *This product does not contain any substances regulated as pollutants pursuant to the Clean.*

CERCLA

- *This material, as supplied, does not contain any substances regulated as hazardous.*

16 FURTHER INFORMATION

Micronbrane Medical provides the information contained herein in good faith being up to date of own realizations at revision time and is applicable to the product with regard to appropriate safety precautions. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. It does not represent any guarantee of the properties of the product.

Micronbrane Medical shall not be held liable for any damage resulting from handling or from contact with the above product.