

**1.0 IDENTIFICATION****1.1 Product Identifier**

Product Name: PCR Primer Mix for B-Cell Assay  
Product Code: M001  
Synonyms: None  
CAS#: N/A

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Recommended Use: For use as part of the clonoSEQ Assay; primers are used to identify and quantify rearranged B-cell receptor gene sequences in DNA extracted from human blood and bone marrow.

**1.3 Details of the supplier of the safety data sheet**

Company Information: Adaptive Biotechnologies  
1551 Eastlake Avenue East  
Seattle, WA 98102  
Telephone: 888-552-8988  
Email: info@adaptivebiotech.com

**1.4 Emergency Telephone Number**

Emergency Telephone number: Adaptive Biotechnologies: 206-693-2228

**2.0 HAZARDS IDENTIFICATION****2.1 GHS Classification:**

Signal Word: None  
Pictogram: None  
Health Hazards: None  
Physical Hazards: None  
Hazard Statements: None  
Precautionary Statements: None

Despite the classification of components in this mixture as nonhazardous, it is strongly recommended that prudent laboratory practices be employed: use of PPE including nitrile gloves, eye protection and lab coats while handling any laboratory reagent is required. Adaptive Biotechnology will not be held liable for any injuries resulting from the handling or from contact with the product listed on this SDS.

### 3.0 COMPOSITION/INFORMATION ON INGREDIENTS

CAS #	Hazardous Components/Chemical Name	Concentration	GHS Classification
N/A	Synthetic single-stranded oligonucleotides		Nonhazardous
N/A	Synthetic double-stranded linear nucleic acids		Nonhazardous
N/A	Yeast tRNA, purified from brewer's yeast		Nonhazardous
N/A	DNA Suspension Buffer (10mM Tris, 0.1mM EDTA, pH 8.0)		Nonhazardous

### 4.0 FIRST AID MEASURES

#### 4.1 Description of first aid measures

**Eye Contact:** Rinse immediately using an eye wash station for 10 to 15 minutes, forcibly opening eyes and removing contacts if necessary. Eyes should be examined by a physician.

**Skin Contact:** Remove contaminated clothes immediately, wash affected area with soap and water. Look for signs of irritation, if irritation is present, seek medical attention.

**Inhalation:** Remove the victim to fresh air and keep him/her calm. In the event of symptoms seek medical treatment.

## 5.0 FIREFIGHTING MEASURES

**5.1 Fire and Explosion Hazard:** None known to exist.

**5.2 Fire Extinguishing Media:** Dry chemical foam, carbon dioxide or water.

## 6.0 ACCIDENTAL RELEASE

### 6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation, wear appropriate PPE such as safety glasses, lab coat with cuffs, gloves and closed toed shoes. If spilled, wear appropriate PPE during clean up and use inert absorbent material for cleaning; avoid walking through the spill. Place spillage in appropriate container for disposal.

### 6.2 Environmental precautions

Take steps to avoid release to the environment, especially drains and sinks.

## 7.0 HANDLING AND STORAGE

### 7.1 Precautions for Safe Handling

Technical measures                      Use prudent laboratory practices for handling and storage of chemicals and reagents, including use of PPE and hand washing prior to exiting the laboratory.

### 7.2 Conditions for safe storage including any incompatibilities

Storage conditions                      - 25°C to -15°C

Incompatible materials                      Information not available

Note to Physician:                      There is no antidote, treat symptomatically and supportively.

## 8.0 EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 Exposure parameters

Exposure Limits	OSHA, ACGIH or NIOSH has not established occupational exposure limits for the components in this mixture.
Appropriate Engineering Controls	General industrial hygiene practices.

### 8.2 Exposure controls

Respiratory protection	None required under normal conditions of use.
Skin protection	Long sleeved lab coat and long pants are required.
Eye protection	Use equipment for eye protection that has been tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
Hand protection	Protective gloves are required, nitrile is recommended.

## 9.0 PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

Form	Liquid
Odor	None
Odor Threshold	No data available
Boiling Point/boiling range	No data available
Melting Point/melting range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Oxidizing properties	No data available
Water solubility	No data available
Upper/lower flammability or explosion limits	No data available
Partition coefficient	No data available
Vapor pressure/density	No data available
pH value	No data available

## 10.0 STABILITY AND REACTIVITY

10.1 Reactivity	No specific test data related to reactivity is available for this product or its ingredients.
10.2 Chemical Stability	Stable under recommended storage conditions.
10.3 Possibility of Hazardous Reactions	Under normal conditions of storage and use, hazardous reactions should not occur.
10.4 Conditions to Avoid	No specific data
10.5 Incompatibility - Materials to Avoid	No specific data
10.6 Hazardous Decomposition Products	No specific data

## 11.0 TOXICOLOGICAL INFORMATION

<b>11.1 Principle Routes of Entry</b>	Ingestion. No specific data Skin contact. No specific data Eye irritation. No specific data Respiratory irritation. No specific data Sensitization. No specific data
<b>11.2 Acute toxicity</b>	No toxicology information is available
Carcinogenic effects	No information available
Mutagenic effects	No information available
Reproductive toxicity	No information available
Sensitization	No information available

## 12.0 ECOLOGICAL INFORMATION

<b>12.1 Toxicity</b>	
Ecotoxicity	No information available
<b>12.2 Persistence and degradability</b>	No information available
<b>12.3 Bioaccumulative potential</b>	No information available
<b>12.4 Mobility in soil</b>	No information available
<b>12.5 Results of PBT/vPvB assessment</b>	No information available
<b>12.6 Other adverse effects</b>	No information available

### **13.0 DISPOSAL CONSIDERATIONS**

Dispose of contents/containers in accordance with federal, state and local regulations

### **14.0 TRANSPORT INFORMATION**

This material is not considered a dangerous material per DOT guidelines or a dangerous good per IATA guidelines regarding classification.

### **15.0 REGULATORY INFORMATION**

The toxicological properties of this material have not been investigated. The material is for research and development purposes only.

### **16.0 OTHER INFORMATION**

For use as part of the clonoSEQ assay.

The above information contained in this document is believed to be accurate but is not warranted to be so and should be used only as a guide. The information shall not be taken as being all inclusive; all materials and mixtures may present unknown hazards and should be used with caution. Since Adaptive Biotechnologies cannot control the actual methods, volumes or conditions of use, Adaptive Biotechnologies shall not be held liable for any damage or injuries resulting from the handling or contact with this product.

Warranty: The above information is believed to be correct but does not purport to be all inclusive; the information should be used as a guide.

Prepared by: Tina S. Bailey, MS, CHMM

Prepared on: May 30, 2019

SDS version Three

End of Safety Data Sheet