

## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product name : Recombinant Dengue Virus Envelope protein, serotypes 1-4  
IUPAC name: -  
Product number : DENV1-ENV, DENV2-ENV, DENV3-ENV, DENV4-ENV  
CAS number:

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### 2. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.  
Not a hazardous substance or mixture according to EC-directives 67/548/EEC or 1999/45/EC.

#### Label elements

The product does not need to be labelled in accordance with EC directives or respective national laws.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Recombinant NS1 protein from Dengue Virus, expressed in a mammalian cell expression system. Sample is of biological origin and is presented as a liquid in a plastic vial. Each vial contains no more than 1000µg.

Additional components present: Dulbecco's PBS at pH7.4

### 4. FIRST AID MEASURES

**If inhaled:** Remove person to fresh air, seek medical advice if breathing becomes difficult.  
**In case of skin contact:** Wash off with soap and water.  
**In case of eye contact:** Rinse at eyewash station.  
**If swallowed:** No treatment required

### 5. FIRE-FIGHTING MEASURES

#### Suitable extinguishing media

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



**Special protective equipment for fire-fighters**  
None required.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions**  
Wear gloves.

**Environmental precautions**  
Prevent further leakage or spillage if safe to do so.

**Methods and materials for containment and cleaning up**  
Pick up using absorbent tissue and arrange for safe disposal. Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

**Precautions for safe handling**  
Avoid contact with skin and eyes.

**Conditions for safe storage**  
Recommended storage temperature: -20 to -80 °C for long term.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

### Personal protective equipment

**Respiratory protection**  
None necessary.

**Hand protection**  
The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.  
Handle with gloves.

**Eye protection**  
Safety glasses if desired

**Skin and body protection**  
Laboratory coat

**Hygiene measures**  
Avoid contact with skin, eyes and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance**  
Colourless liquid

**Safety data**  
pH: pH 7.4  
Melting point: no data available  
Boiling point: no data available  
Flash point: no data available



Ignition temperature: no data available  
Lower explosion limit: no data available  
Upper explosion limit: no data available  
Water solubility: soluble

## 10. STABILITY AND REACTIVITY

### Chemical stability

Stable under recommended storage conditions.

### Conditions to avoid

Avoid multiple freeze thaw cycles

### Materials to avoid

Strong oxidizing agents

### Hazardous decomposition products

None known

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

no data available

### Skin corrosion/irritation

no data available

### Serious eye damage/eye irritation

no data available

### Respiratory or skin sensitization

no data available

### Germ cell mutagenicity

no data available

### Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

### Reproductive toxicity

no data available

### Aspiration hazard

no data available

### Potential health effects

<b>Inhalation</b>	None
<b>Ingestion</b>	None
<b>Skin</b>	None
<b>Eyes</b>	May cause eye irritation.

### Signs and Symptoms of Exposure

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

### Additional Information



## 12. ECOLOGICAL INFORMATION

### Toxicity

No data available

### Persistence and degradability

Degrades easily

### Bioaccumulative potential

Low

### Mobility in soil

no data available

### PBT and vPvB assessment

no data available

### Other adverse effects

no data available

## 13. DISPOSAL CONSIDERATIONS

### Product

Observe all federal, state, and local environmental regulations. Can be disposed of down sink.

### Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

Not dangerous goods, no transport limitations.

## 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## 16. OTHER INFORMATION

None

**Last update:** 29 December 2016

**Prepared by:** The Native Antigen Company

Although the information, opinions and recommendations contained in this Safety Data Sheet are compiled from sources believed to be reliable, we accept no responsibility for the accuracy, sufficiency, or reliability or for any loss or injury resulting from the use of the information.