

**Safety Information**  
**Human Interleukin-21 ELISA**

Revision Date: 7.3.2018

The RAF057R Human Interleukin-21 ELISA is an enzyme-linked immunosorbent assay for the quantitative detection of human IL-21.

For professional use only. Users should have a thorough understanding of the Product Data Sheet prior to their use of this kit.

Kit Components:

- A) Antibody Coated Microtiter Strips
- B) Biotin-Conjugate
- C) Streptavidin-HRP
- D) Standard
- E) Sample Diluent
- F) Assay Buffer Concentrate
- G) Wash Buffer Concentrate
- H) Substrate Solution
- I) Stop Solution
- J) Adhesive Films

Component I) contains hazardous mixture according to CLP Regulation (EC) as amended.  
Safety Data Sheet according to actual Regulations (EC/EU) is attached.

**MATERIAL SAFETY DATA SHEET**

in accordance with Regulation (EC) No. 1907/2006 of the European Parliament  
and the Council (REACH) and Commission Regulation (EU) No. 830/2015

**Stop Solution (RAF057R Kit)**

Date of issue: 7.3.2018

Supersedes date:

**SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING**

**1.1 Product identifier**

**Trade name:** Stop Solution (RAF057R Kit)

**Additional identification:** 1M Phosphoric acid (H<sub>3</sub>PO<sub>4</sub>)

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

Assay component – stop solution.

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

BioVendor - Laboratorní medicína a.s.

Karásek 1767/1

621 00 Brno

Czech Republic

Identification number: 63471507

Tel: +420 549 124 185

E-mail: info@biovendor.com

**1.4 Emergency telephone number**

Toxicology information centre, Na Bojišti 1, 128 21 Prague, Czech Republic, Tel: +420 224 919 293 or +420 224 915 402 (non-stop service).

**SECTION 2 HAZARDS IDENTIFICATION**

**2.1 Classification of the substance or mixture**

**Classification according to Regulation 1272/2008/EC:**

Corrosive to metals (Category 1), H290

**2.2 Label elements**

**Labelling according Regulation (EC) No 1272/2008**

**Hazard pictogram:**



**Signal word:**

Warning

**Hazard statement:**

H290 May be corrosive to metals.

**Precautionary statement(s)**

None

**Supplemental hazards statements**

None

**2.3 Other hazards**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

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**SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**

**3.1 Mixtures**

| Ingredient      | Conc. %    | CAS-Nr.   | EC-Nr.    | Index-Nr.    |
|-----------------|------------|-----------|-----------|--------------|
| Phosphoric acid | ≥ 5 – < 10 | 7664-38-2 | 231-633-2 | 015-011-00-6 |

**Classification according to regulation 1272/2008/EC:**

Met. Corr. 1; H290

Concentration limits: ≥ 25 %: Skin Corr. 1B, H314; 10 - < 25 %: Skin Irrit. 2, H315; 10 - < 25 %: Eye Irrit. 2, H319

For full text of H-phrases see section 16.

**SECTION 4 FIRST AID MEASURES**

**4.1 Description of first aid measures**

**General advice**

Consult a physician. Show this safety data sheet to the doctor in attendance.

**If inhaled:** If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed:** Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

**4.3 Indication of any immediate medical attention and special treatment needed**

No data available.

**SECTION 5 FIREFIGHTING MEASURES**

**5.1 Extinguishing media**

**Suitable extinguishing media**

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

**5.2 Special hazards arising from the substance or mixture**

No data available

**5.3 Advice for firefighters**

Wear self-contained breathing apparatus for firefighting if necessary.

**5.4 Further information**

No data available.

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**SECTION 6 ACCIDENTAL RELEASE MEASURES**

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

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.  
Evacuate personnel to safe areas.  
For personal protection see section 8.

**6.2 Environmental precautions**

Do not let product enter drains.

**6.3 Methods and materials for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**6.4 Reference to other sections**

For disposal see section 13.

**SECTION 7 HANDLING AND STORAGE**

**7.1 Precautions for safe handling**

Avoid inhalation of vapour or mist.  
For precautions see section 2.2.

**7.2 Conditions for safe storage, including any incompatibilities**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**7.3 Specific end use(s)**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

**SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

**8.1 Control parameters**

Components with workplace control parameters.

**8.2 Exposure controls**

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**a) Eye/face protection:** Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**b) Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

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

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- c) Body Protection:** Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.
- d) Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).
- e) Control of environmental exposure:** Do not let product enter drains.

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| <b>SECTION 9    PHYSICAL AND CHEMICAL PROPERTIES</b> |
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**9.1 Information on basic physical and chemical properties**

|   |   |
|---|---|
| a) Appearance                                   | Form: clear, liquid<br>Colour: colourless |
| b) Odour  | No data available                         |
| c) Odour Threshold                              | No data available                         |
| d) pH   | No data available                         |
| e) Melting point/freezing point                 | No data available                         |
| f) Initial boiling point and boiling range      | No data available                         |
| g) Flash point                                  | No data available                         |
| h) Evaporation rate                             | No data available                         |
| i) Flammability (solid, gas)                    | No data available                         |
| j) Upper/lower flammability or explosive limits | No data available                         |
| k) Vapour pressure                              | No data available                         |
| l) Vapour density                               | No data available                         |
| m) Relative density                             | No data available                         |
| n) Water solubility                             | No data available                         |
| o) Partition coefficient: n-octanol/water       | No data available                         |
| p) Auto-ignition temperature                    | No data available                         |
| q) Decomposition temperature                    | No data available                         |
| r) Viscosity                                    | No data available                         |
| s) Explosive properties                         | No data available                         |
| t) Oxidizing properties                         | No data available                         |

**9.2 Other safety information**

No data available.

|   |
|---|
| <b>SECTION 10    STABILITY AND REACTIVITY</b> |
|---|

**10.1 Reactivity**

No data available.

**10.2 Chemical stability**

Stable under recommended storage conditions.

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**10.3 Possibility of hazardous reactions**

No data available.

**10.4 Conditions to avoid**

No data available.

**10.5 Incompatible materials**

Strong bases, Powdered metals.

**10.6 Hazardous decomposition products**

Hazardous decomposition products formed under fire conditions - oxides of phosphorus. Other decomposition products - No data available.

In the event of fire: see section 5.

**SECTION 11 TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects**

**Acute toxicity**

No data available

Skin corrosion/irritation:

No data available

Serious eye damage/eye irritation:

No data available

Respiratory or skin sensitisation:

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

Specific target organ toxicity - single exposure:

No data available

Specific target organ toxicity - repeated exposure:

No data available

Aspiration hazard:

No data available

Additional Information:

RTECS: Not available

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea.

**SECTION 12 ECOLOGICAL INFORMATION**

**12.1 Toxicity**

No data available.

**12.2 Persistence and degradability**

No data available.

**12.3 Bioaccumulative potential**

No data available.

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**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment**

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**12.6 Other adverse effects**

No data available.

**SECTION 13 DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**13.2 Contaminated packaging**

Dispose of as unused product.

**SECTION 14 TRANSPORT INFORMATION**

**14.1 UN number**

ADR/RID: 1805                      IMDG: 1805                      IATA: 1805

**14.2 UN proper shipping name**

ADR/RID:                      PHOSPHORIC ACID SOLUTION  
 IMDG:                      PHOSPHORIC ACID SOLUTION  
 IATA:                      Phosphoric acid, solution

**14.3 Transport hazard class(es)**

ADR/RID: 8                      IMDG: 8                      IATA: 8

**14.4 Packaging group**

ADR/RID: III                      IMDG: III                      IATA: III

**14.5 Environmental hazards**

ADR/RID: no                      IMDG Marine pollutant: no                      IATA: no

**14.6 Special precautions for user**

No data available.

**SECTION 15 REGULATORY INFORMATION**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

Act No. 350/2011 Coll., to regulate chemical substances and chemical mixtures and to amend some statutes, as amended. Implemented regulations to Act No. 350/2011 Coll., as amended  
 The Waste Act as amended. Government Decree No. 361/2007 Coll., to regulate the conditions of occupational health and safety, as amended. Regulation of the European Parliament and the

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Council (EC) No. 1907/2006 (REACH). Regulation of the European Parliament and the Council  
(EC) No. 1272/2008 (CLP). Commission Regulation (EU) No. 830/2015.

**15.2 Chemical safety assessment**

For this product a chemical safety assessment was not carried out.

**SECTION 16 OTHER INFORMATION**

**Date of issue:** 7.3.2018

**Supersedes date:**

**Full text of H-Statements**

**H290** May be corrosive to metals.

**H314** Causes severe skin burns and eye damage.

**H315** Causes skin irritation.

**H319** Causes serious eye irritation.

**Advice on training**

Workers shall receive appropriate training to acquaint them with the recommended use, mandatory protective equipment, first aid measures and banned manners of handling the mixture.

**Note:**

The safety data sheet contains data necessary for ensuring occupational health and safety and protection of the environment. The given data correspond to the current state of knowledge and experience and comply with valid legal regulations. The data cannot be considered a guarantee that the specific use of the product will be appropriate.