

SAFETY INFORMATION

Product name: HUMAN Tie-2 ELISA
Catalogue number: REH011R
Characteristics: REH011R HUMAN Tie-2 ELISA kit is an *in vitro* enzyme-linked immunosorbent assay for the quantitative measurement of human Tie-2 in serum, plasma, and cell culture supernatants.
Intended use: For professional use only. Users should have a thorough understanding of the IFU prior to their use of this kit.

Manufacturer: BioVendor – Laboratorní medicína a.s.
Registered office: Karásek 1767/1, 621 00 Brno, Czech Republic
Company ID: 63471507

Kit Components	Contents hazardous substance
Tie-2 Microplate (Item A)	
Wash Buffer Concentrate (20X) (Item B)	
Standard Protein (Item C)	
Detection Antibody Tie-2 (Item F)	
HRP-Streptavidin Concentrate (Item G)	
TMB One-Step Substrate Reagent (Item H)	
Stop Solution (Item I)	Sulphuric Acid < 5%
Assay Diluent A (Item D)	
Assay Diluent D (Item K)	
Assay Diluent B (Item E)	

Safety Data Sheets in accordance with the current (EC/EU) Regulations as amended are attached.

Sulphuric Acid < 5 %**SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING****1.1 Product identifier**

Trade name: Sulphuric Acid < 5 %

Other name: Sulfuric Acid < 5 %

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

Stop solution for the ELISA kit.

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

Website: www.biovendor.com

1.4 Emergency telephone number

European Chemicals Agency. National helpdesks contact details

<https://echa.europa.eu/support/helpdesks>

Links to Poison Centers and Clinical Toxicologists all over the World:

<https://www.eapcct.org/index.php?page=links>

SECTION 2 HAZARDS IDENTIFICATION**2.1 Classification of the substance or mixture**

Classification according to Regulation 1272/2008/EC:

Corrosive to metals, Met. Corr. 1, H290

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200). (USA)

2.2 Label elements

Hazard pictogram:



GHS05

Signal word: Warning

Hazard statement:

H290 May be corrosive to metals.

Precautionary statement:

not assigned

2.2.1 Labelling of packages where the contents does not exceed 125 ml:

Hazard pictogram:

none

Signal word:

none

Sulphuric Acid < 5 %**Hazard statement:**

none

Precautionary statement:

none

2.3 Other hazards

This 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.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS**3.1 Mixtures**

Ingredient	Conc. in w/w %	EINECS	CAS-Nr.	Index-Nr.
Sulphuric acid, 98 %	< 5	231-639-5	7664-93-9	016-020-00-8
REACH RN: 01-2119458838-20-xxxx				

Classification according to regulation 1272/2008/EC:

Met. Corr. 1, H290

Skin Corr. 1A, H314

Eye Dam. 1, H318

Specific concentration limits: Skin Corr. 1A, H314: C_{≥15} %; Skin Irrit. 2, H315: 5 % ≤ C < 15 %; Eye Irrit. 2, H319: 5 % ≤ C < 15 %.

For full text of and H-phrases see section 16.

SECTION 4 FIRST AID MEASURES**4.1 Description of first aid measures****General information:**

If feeling unwell or unsure, inform a doctor and show information from this Safety Data Sheet. If unconscious, place the affected person in the recovery position on their side with their head slightly backwards and take care there is no obstruction in their respiratory tract, NEVER induce vomiting. If the affected person is vomiting, ensure that they do not choke on their own vomit.

If inhaled: Immediately stop the exposure, take the affected person to fresh air. Keep the affected person warm. Get medical attention if irritation, shortness of breath or other symptoms persists.

In case of skin contact: Take off contaminated clothing. Wash the affected area with plenty of lukewarm water, if possible. If skin is not irritated, soap, soap solution or shampoo can be used. Get medical attention if irritation persists.

In case of contact with eyes: Rinse the eyes immediately with plenty of running water keeping eyelids open; if the affected person wears contact lenses, remove them immediately. Continue rinsing for minimum 10 minutes. Get medical attention.

If ingested: DO NOT INDUCE VOMITING – even the act of inducing vomiting may cause complications. Rinse mouth, if possible, administer a small dose of activated carbon (1-2 crushed tablets); do not attempt neutralization. Get medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: Possible respiratory tract irritation, cough, headache.

Skin contact: Painful reddening, irritation.

Eye contact: May cause irritation.

Ingestion: May cause irritation, sickness.

4.3 Indication of any immediate medical attention and special treatment needed

Immediate medical attention is not necessary.

Sulphuric Acid < 5 %**SECTION 5 FIREFIGHTING MEASURES****5.1 Extinguishing media**

Suitable extinguishing media: Alcohol resistant foam, carbon dioxide, powder, dispersed water, water spray.

Unsuitable extinguishing media: none known.

5.2 Special hazards arising from the substance or mixture

In case of fire sodium oxides can be released.

5.3 Advice for firefighters

Keep the contaminated fire-extinguishing media away from drains, surface and ground water. If necessary, wear a suitable self-contained breathing apparatus and full protective clothing.

SECTION 6 ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment and emergency procedures**

Ensure sufficient ventilation. Wear proper protective equipment, refer to Section 8.

6.2 Environmental precautions

Avoid soil contamination and keep away from surface and ground water. Avoid spills and keep away from drains.

6.3 Methods and material for containment and cleaning up

Cover spills with suitable (non-flammable) absorbent (sand, diatomaceous earth, soil, and other suitable absorbent material); collect in a tightly closed container and dispose of in compliance with Section 13. Dispose of the contained material in accordance with local regulations. After containment, wash the affected area with plenty of water or other suitable detergent.

6.4 Reference to other sections

See section 7 for handling, section 8 for personal protective equipment, section 13 for disposal.

SECTION 7 HANDLING AND STORAGE**7.1 Precautions for safe handling**

Do not inhale gases and vapours. Avoid contact with the skin and the eyes. Wear suitable personal protective equipment according to Section 8. Comply with local and national regulations on occupational health and safety. Avoid long-term and repeated exposure.

7.2 Conditions for safe storage, including any incompatibilities

Keep in tightly closed containers and in cool, dry and well-ventilated designated places. Open packaging must be carefully closed and kept in a vertical position to avoid release or spill. Keep away from alkaline materials.

7.3 Specific end use(s)

See Section 1.2., no other uses are identified.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1 Control parameters**

Czech Republic (Government Decree no. 361/2007 Sb. as amended): Sulphuric acid, SO₃: long term 1 mg/m³, short term 2 mg/m³, note I (causes irritation of mucous membranes (eyes, respiratory tract) and skin irritation).

Sulphuric Acid < 5 %
8.2 Exposure controls
8.2.1 Appropriate engineering controls

Use in a well-ventilated area.

8.2.2 Individual protection measures, such as personal protective equipment

Take usual occupational health and safety measures. If it is impossible to meet exposition limits, suitable respiratory protective equipment must be used. When using, do not eat, drink and smoke. Wash hands carefully with water and soap after work and before breaks.

a) Eye/face protection:


Use protective glasses (according to EN 166).

b) Skin protection:

Hand protection:

Use suitable protective gloves resistant to the product. Follow the recommendations of the gloves manufacturer when selecting the appropriate thickness, material and permeability. In the event of long-term or repeated dermal exposure, apply suitable hand cream to the parts of the skin in direct contact with the mixture. Follow other recommendations of the manufacturer.


Body protection:

Protective cotton clothing. Carefully wash the skin exposed to the product.

c) Respiratory protection:


If necessary, wear a face respirator (according to EN 14387).

d) Thermal hazards: No information available.

8.2.3 Environmental exposure controls

Refer to Sections 6 and 12.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Not determined
pH:	0.8
Melting point/freezing point (°C):	No data available

Sulphuric Acid < 5 %

Initial boiling point and boiling range (°C):	No data available
Flash point (°C):	No data available
Evaporation rate:	No data available
Flammability:	No data available
Upper/lower flammability or explosive limits:	No data available
Vapour pressure:	No data available
Vapour density:	
Relative density:	No data available
Solubility:	Soluble in water
Partition coefficient n-octanol/water:	
Auto-ignition temperature (°C):	
Decomposition temperature:	
Viscosity:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

9.2 Other information

None known.

SECTION 10 STABILITY AND REACTIVITY
10.1 Reactivity

No hazardous reactions occur under common conditions of use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Reacts with strong bases.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

Not known under recommended conditions of use.

10.6 Hazardous decomposition products

They are not produced under normal use. In the event of fire: sulphur oxides.

SECTION 11 TOXICOLOGICAL INFORMATION
11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity:	The classification criteria are not met.
Sulphuric acid:	
LD50, oral, rat:	3140 mg/kg
LD50, inhalation, rat:	510 mg/m ³ /2 h
Skin corrosion/ irritation:	The classification criteria are not met. May cause mild irritation.
Serious eye damage/ irritation:	The classification criteria are not met. May cause mild irritation.
Respiratory or skin sensitisation:	The classification criteria are not met.
Germ cell mutagenicity:	The classification criteria are not met.
Carcinogenicity:	The classification criteria are not met.
Reproductive toxicity:	The classification criteria are not met.
STOT – single exposure:	The classification criteria are not met.
STOT – repeated exposure:	The classification criteria are not met.

Sulphuric Acid < 5 %

Aspiration hazard:
Reproduction toxicity:

The classification criteria are not met.
No data available.

11.2 Information on other hazards

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher.

SECTION 12 ECOLOGICAL INFORMATION**12.1 Toxicity**

No data available on the product itself.

Sulphuric acid:

LC50, fish, <i>Gambusia affinis</i> , 96 h:	42 mg/l
LC50, crustaceans, <i>Pandalus montagui</i> , 48 h:	42,5 mg/l

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

Does not meet the criteria for PBT and vPvB.

12.6 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1 % or higher.

12.7 Other adverse effects

No data available.

SECTION 13 DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Dispose of in accordance with applicable national regulations, to regulate packaging and to amend some statutes (the Packaging Act), as amended and in accordance with implemented regulations on waste disposal.

Appropriate methods of waste treatment of both the substance or the mixture and any contaminated packaging:

The indicated waste, including the waste identification sheet, shall be handed over to a company authorized to treat and dispose of wastes according to the Waste Act and that the company producing waste has entered into a contract with.

Both completely empty and not completely empty packaging shall be placed in designated containers for waste collection and the indicated waste shall be handed over for disposal to a person authorized to dispose of the waste.

Waste type code 060101

Waste type sulphuric acid and sulphurous acid *

Waste subgroup waste from production, processing, distribution and use (VZDP) of acids

Waste group WASTE CREATED BY ANORGANIC CHEMICAL PROCESSES

Waste type code for packaging 150110

Sulphuric Acid < 5 %

Waste type	packaging containing residues of dangerous substances or packaging contaminated with these substances*
Waste subgroup	Packaging (including separately collected household packaging material)
Waste group	WASTE PACKAGING; ABSORPTION AGENTS; CLEANING CLOTHS; FILTRATION MATERIALS AND PROTECTIVE CLOTHING NOT SPECIFIED IN ANY OTHER MANNER

(*) – hazardous waste according to Directive No. 91/689/EEC on hazardous waste

SECTION 14 TRANSPORT INFORMATION**14.1 UN number or ID number**

3264.

14.2 UN proper shipping name

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (sulphuric acid).

14.3 Transport hazard class

8.

14.4 Packing group

III.

14.5 Environmental hazards

No.

14.6 Special precautions for user

No data available.

14.7 Maritime transport in bulk according to IMO instruments

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 Council (EC) No. 1907/2006 (REACH). Regulation of the European Parliament and the Council (EC) No. 1272/2008 (CLP). Commission Regulation (EU) No. 878/2020.

U.S. Federal regulations:

TSCA 8(a) CDR Exempt/Partial exemption: Not determined
United States inventory (TSCA 8b): All components are listed or exempted.
Clean Water Act (CWA) 311: sulphuric acid.

15.2 Chemical safety assessment

Chemical safety assessment has not been carried out.

SECTION 16 OTHER INFORMATION**Warning:**

The safety data sheet contains data needed for securing safety and health protection during work and environmental protection. The stated data correspond to the current state of knowledge and

Sulphuric Acid < 5 %

experience and is in accordance with valid legal regulations. It cannot be deemed as a guarantee of the properties, suitability, and usefulness of the product for specific application and therefore no contractual legal relationships are hereby created.

The safety data sheet is the property of the physical or legal entity stated in Section 1 and is protected by copy-right. All copying, distribution or sales without the consent of the owner is forbidden.

Relevant phrases:

- H290 May be corrosive to metals.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.

Hazardous Material Information System (U.S.A.)

Health	1
Chronic Health Hazard	
Flammability	0
Physical Hazards	0

National Fire Protection Association (U.S.A.)

Health	1
Flammability	0
Instability/Reactivity	0
Special	

Training hints:

Pursuant to article No 35 of the European Parliament and Council Regulation (ES) No 1907/2006, the employer must allow employees or their representatives access to information from the safety data sheet of the substance or preparation, which the employees use or to the effects of which they may be exposed during their work.

Physical entities performed individual activities within the scope of handling of this hazardous product are trained and regularly, at least once a year, retrained.

Product information sources: safety data sheet, product or technical information, safety instructions, and other expert documents for the product, issued by the supplier.

Recommended restriction of use:

The product is designed only for professional purposes. It must not be used in households. The product can only be handled by a person older than 18 years, who is sufficiently informed about the work procedures, hazardous properties of the product, and also about the necessary safety measures.

The product is to be used only for the purpose, for which it is designed. It is up to the user's responsibility to adhere to the product usage conditions and to respect the safety instructions for health and environmental protection.

Further information: This product must be stored, sold, and used in accordance with valid hygienic regulations.

Date of issue: 30.5.2022

Revision notes: Commission Regulation (EU) No. 830/2015 was replaced by Commission Regulation (EU) No. 878/2022. Change of classification of the mixture. Exception for labelling of packaging not exceeding 125 ml, addition of REACH RN of the component, change of section 11 structure, addition of transport information in section 14.