

# Mouse TRACP-5b (Tartrate Resistant Acid Phosphatase 5b) ELISA Kit Cat#: orb1146716 (MSDS)

1. Identification

1.1 GHS Product identifier
Product name ELISA test assay

1.2 Other means of identification Product number - orb1146716 Other names ELISA Kit

1.3 Recommended use of the chemical and restrictions on use Identified uses For research use only
Uses advised against no data available

2. Hazard identification

**2.1 Classification of the substance or mixture** Not classified.

2.2 GHS label elements, including precautionary statements Pictogram(s) No symbol.

Signal word No signal word

Hazard statement(s) none

Precautionary statement(s)
Prevention none
Response none
Storage none
Disposal none

2.3 Other hazards which do not result in classification no data available



# 3. Composition/information on ingredients

#### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
Water	Water	7732-18- 5	231-791- 2	78. 39%
Sodium chloride	Sodium chloride	7647-14- 5	231-598- 3	14. 16%
Sucrose	Sucrose	57-50-1	200-334- 9	2. 28%
Poly(oxy-1,2-ethanediyl),α- hydro-ω-hydroxy- Ethane-1,2- diol, ethoxylated	Poly (ethylene glycol) - 4000	25322- 68-3	500-038- 2	1. 33%
Potassium sodium tartrate tetrahydrate	Potassium sodium tartrate tetrahydrate	6381-59- 5	613-385- 0	1. 07%
Potassium chloride	Potassium chloride	7447-40- 7	231-211- 8	0.81%
Disodium phosphate dodecahydrate	Disodium hydrogen phosphate	10039- 32-4	600-088- 6	0. 63%
Glycerol	Glycerol	56-81-5	200-289- 5	0. 51%
Trisodium citrate	Sodium citrate	68-04-2	200-675-	0. 42%
Polyvinyl pyrrolidone	PVP40	9003-39- 8	618-363- 4	0. 35%
Potassium dihydrogenorthophosphate	Potassium dihydrogen phosphate	7778-77- 0	231-913- 4	0. 05%

#### 4. First-aid measures

# 4.1 Description of necessary first-aid measures

#### **General advice**

Medical attention is required. Consult a doctor. Show this safety data sheet (SDS) to the doctor in attendance.

#### If inhaled

Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

# Following skin contact

Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.





#### Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

#### Following ingestion

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

# 4.2 Most important symptoms/effects, acute and delayed

no data available

# 4.3 Indication of immediate medical attention and special treatment needed, if necessary

no data available

# 5. Fire-fighting measures

#### 5.1 Extinguishing media

# Suitable extinguishing media

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

# 5.2 Specific hazards arising from the chemical

no data available

# 5.3 Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 6. Accidental release measures

# 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

#### 6.2 Environmental precautions

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

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

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.





# 7. Handling and storage

# 7.1 Precautions for safe handling

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

# 7.2 Conditions for safe storage, including any incompatibilities

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

# 8. Exposure controls/personal protection

# 8.1 Control parameters

# **Occupational Exposure limit values**

Component	Sodium chl	Sodium chloride					
CAS No.	7647-14-5	7647-14-5					
	Limit valu	Limit value - Eight hours Limit value - Short term					
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>			
Latvia		5					
	Remarks						

Component	Sucrose	ucrose				
CAS No.	57-50-1	57-50-1				
	Limit v	alue - Eight hours	Limit value -	Short term		
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>		





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Component	Sucrose				
CAS No.	57-50-1				
Australia	10 (1)				
Belgium	10				
Canada - Ontario	10				
Canada - Québec	10				
France	10				
Ireland	10		20 (1)		
New Zealand	10 (1)				
Singapore	10				
South Korea	10				
Spain	10				
USA - NIOSH	10 total dust				
	5 respirable frac	etion			
USA - OSHA	15 inhalable aer	osol			
	5 respirable aero	osol			
United Kingdom	10		20		
	Remarks				
Australia	(1) This value is for inhal	able dust containing no asbestos a	and		
Ireland	(1) 15 minutes reference p	period			
New Zealand	(1) The value for inhalabl silica.	le dust containing no asbestos and	less than 1% free		





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Component	Potassium o	Potassium chloride					
CAS No.	7447-40-7	7447-40-7					
	Limit val	Limit value - Eight hours Limit value - Short term					
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>			
Latvia		5					
	Remarks						

Component	Glycerol				
CAS No.	56-81-5	;			
	Limit	value - Eight hours	Limit value - Short term		
	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	
Australia		10 (1)			
Belgium		10			
Canada - Ontario		10			
Canada - Québec		10			
Finland		20			
France		10			
Germany (AGS)		200 (1)		400 (1)(2)	
Germany (DFG)		200 (1)		400 (1)(2)	
Ireland		10			
New Zealand		10 (1)			





Component	Glycerol					
CAS No.	56-81-5					
Poland	10					
Singapore	10					
South Korea	10					
Spain	10					
Switzerland	50 inhalable aerosol	100 inhalable aerosol				
USA - OSHA	15 inhalable dust					
	5 respirable dust					
United Kingdom	10					
	Remarks					
Australia	(1) This value is for inhalable dust conta	ining no asbestos and				
Germany (AGS)	(1) Inhalable fraction (2) 15 minutes ave	(1) Inhalable fraction (2) 15 minutes average value				
Germany (DFG)	(1) Inhalable fraction (2) 15 minutes ave	rage value				
New Zealand	(1) The value for inhalable dust containisilica.	ng no asbestos and less than 1% free				

# 8.2 Appropriate engineering controls

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

# 8.3 Individual protection measures, such as personal protective equipment (PPE) Eye/face protection

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

# Skin protection

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. 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.

#### Respiratory protection

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

#### Thermal hazards

no data available

# 9. Physical and chemical properties

Physical state colourless liquid Colour no data available Odour no data available





Melting point/ freezing point 0 ºC

**Boiling point or initial** 

boiling point and boiling range 100°C(lit.)

Flammability no data available

Lower and upper explosion limit / flammability limit no data available

Flash point 100°C

Auto-ignition temperature no data available

**Decomposition temperature** no data available

pH no data available

Kinematic viscosity no data available

Solubility no data available

Partition coefficient noctanol/water no data available

Vapour pressure 3 mm Hg ( 37 °C)

Density and/or relative density 1.000g/mLat 3.98°C(lit.)

Relative vapour density <1 (vs air)

Particle characteristics no data available

#### 10. Stability and reactivity

#### 10.1 Reactivity

no data available

#### 10.2 Chemical stability

no data available

#### 10.3 Possibility of hazardous reactions

no data available

#### 10.4 Conditions to avoid

no data available

#### 10.5 Incompatible materials

no data available

#### 10.6 Hazardous decomposition products

no data available

# 11. Toxicological information

#### **Acute toxicity**

Oral: no data available Inhalation: no data available

Dermal: no data available





Skin corrosion/irritation

no data available

Serious eye damage/irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

**STOT-single exposure** 

no data available

**STOT-repeated exposure** 

no data available

**Aspiration hazard** 

no data available

# 12. Ecological information

# 12.1 Toxicity

Toxicity to fish: no data available

Toxicity to daphnia and other aquatic invertebrates: no data available

Toxicity to algae: no data available

Toxicity to microorganisms: no data available

# 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 Other adverse effects

no data available





#### 13. Disposal considerations

## 13.1 Disposal methods

#### **Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

# **Contaminated packaging**

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning.

Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

#### 14. Transport information

#### 14.1 UN Number

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

## 14.2 UN Proper Shipping Name

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

#### 14.3 Transport hazard class(es)

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

#### 14.4 Packing group, if applicable

ADR/RID: Not dangerous goods. IMDG: Not dangerous goods. IATA: Not dangerous goods.

#### 14.5 Environmental hazards

ADR/RID: No IMDG: No IATA: No

#### 14.6 Special precautions for user

no data available

#### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available



# 15. Regulatory information

# 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
Water	Water	7732-18-5	231-791-2
European Invento (EINECS)	Not Listed.		
EC Inventory	Not Listed.		
<b>United States Toxi</b>	c Substances Control Act (TSCA) In	ventory	Not Listed.
China Catalog of I	Hazardous chemicals 2015		Not Listed.
New Zealand Inve	ntory of Chemicals (NZIoC)		Not Listed.
Philippines Invent (PICCS)	ory of Chemicals and Chemical Subs	tances	Not Listed.
Vietnam National	Chemical Inventory		Not Listed.
Chinese Chemical IECSC)	Not Listed.		
,			
Chemical name	Common names and synonyms	CAS number	EC number
Chemical name Sodium chloride	Common names and synonyms Sodium chloride	<b>CAS number</b> 7647-14-5	EC number 231-598-3
Sodium chloride	<u> </u>	7647-14-5	
Sodium chloride  European Inventor	Sodium chloride	7647-14-5	231-598-3
Sodium chloride European Inventor (EINECS) EC Inventory	Sodium chloride	7647-14-5 Substances	231-598-3 Not Listed.
Sodium chloride European Inventor (EINECS) EC Inventory United States Toxi	Sodium chloride ry of Existing Commercial Chemical	7647-14-5 Substances	231-598-3 Not Listed. Not Listed.
Sodium chloride  European Inventor (EINECS)  EC Inventory United States Toxi China Catalog of I	Sodium chloride ry of Existing Commercial Chemical c Substances Control Act (TSCA) In	7647-14-5 Substances	231-598-3  Not Listed.  Not Listed.  Not Listed.
Sodium chloride European Inventor (EINECS) EC Inventory United States Toxi China Catalog of I	Sodium chloride ry of Existing Commercial Chemical c Substances Control Act (TSCA) In Hazardous chemicals 2015	7647-14-5 Substances ventory	231-598-3  Not Listed.  Not Listed.  Not Listed.  Not Listed.
Sodium chloride European Inventor (EINECS) EC Inventory United States Toxi China Catalog of I New Zealand Inventor (PICCS)	Sodium chloride ry of Existing Commercial Chemical c Substances Control Act (TSCA) In Hazardous chemicals 2015 ntory of Chemicals (NZIoC)	7647-14-5 Substances ventory	231-598-3  Not Listed.  Not Listed.  Not Listed.  Not Listed.  Not Listed.  Not Listed.





**EC** number Common names and synonyms CAS number Chemical name Sucrose 57-50-1 200-334-9 Sucrose **European Inventory of Existing Commercial Chemical Substances** Not Listed. (EINECS) EC Inventory Not Listed. United States Toxic Substances Control Act (TSCA) Inventory Not Listed. China Catalog of Hazardous chemicals 2015 Not Listed. New Zealand Inventory of Chemicals (NZIoC) Not Listed. Philippines Inventory of Chemicals and Chemical Substances Not Listed. (PICCS) Vietnam National Chemical Inventory Not Listed. Chinese Chemical Inventory of Existing Chemical Substances (China Not Listed. IECSC) CAS Common names Chemical name **EC** number and synonyms number Poly (ethylene glycol) -25322-68-Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy-500-038-2 Ethane-1,2-diol, ethoxylated 4000 **European Inventory of Existing Commercial Chemical Substances** Not Listed. (EINECS) EC Inventory Not Listed. United States Toxic Substances Control Act (TSCA) Inventory Not Listed. China Catalog of Hazardous chemicals 2015 Not Listed. New Zealand Inventory of Chemicals (NZIoC) Not Listed. Philippines Inventory of Chemicals and Chemical Substances Not Listed. (PICCS) Vietnam National Chemical Inventory Not Listed. Chinese Chemical Inventory of Existing Chemical Substances (China Not Listed. IECSC)





CAS Common names and Chemical name EC number number synonyms Potassium sodium tartrate Potassium sodium tartrate 6381-59-5 613-385-0 tetrahydrate tetrahydrate **European Inventory of Existing Commercial Chemical Substances** Not Listed. (EINECS) Not Listed. EC Inventory United States Toxic Substances Control Act (TSCA) Inventory Not Listed. China Catalog of Hazardous chemicals 2015 Not Listed. New Zealand Inventory of Chemicals (NZIoC) Not Listed. Philippines Inventory of Chemicals and Chemical Substances Not Listed. (PICCS) Vietnam National Chemical Inventory Not Listed. Chinese Chemical Inventory of Existing Chemical Substances (China Not Listed. IECSC) Chemical name Common names and synonyms EC number CAS number 231-211-8 Potassium chloride Potassium chloride 7447-40-7 **European Inventory of Existing Commercial Chemical Substances** Not Listed. (EINECS) EC Inventory Not Listed. **United States Toxic Substances Control Act (TSCA) Inventory** Not Listed. China Catalog of Hazardous chemicals 2015 Not Listed. New Zealand Inventory of Chemicals (NZIoC) Not Listed. Philippines Inventory of Chemicals and Chemical Substances Not Listed. (PICCS) Vietnam National Chemical Inventory Not Listed. Chinese Chemical Inventory of Existing Chemical Substances (China Not Listed. IECSC)





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Chemical nam	ne	Common names and synonyms	CAS number	EC number
disodium hydrogen ph	-	disodium hydrogen phosphate	10039-32-4	600-088-6
European Inventor (EINECS)	Not Listed.			
EC Inventory				Not Listed.
<b>United States Toxi</b>	c Subst	ances Control Act (TSCA) Inv	entory	Not Listed.
China Catalog of H	Iazardo	ous chemicals 2015		Not Listed.
New Zealand Inver	ntory of	Chemicals (NZIoC)		Not Listed.
Philippines Invento (PICCS)	ory of C	Chemicals and Chemical Subst	ances	Not Listed.
Vietnam National	Chemic	al Inventory		Not Listed.
Chinese Chemical IECSC)	Invento	ory of Existing Chemical Subst	ances (China	Not Listed.
Chemical name	Com	mon names and synonyms	CAS number	EC number
	~~~	mon names and synonyms	CAS number	EC number
Glycerol		Glycerol	56-81-5	200-289-5
		, ,	56-81-5	
European Inventor		Glycerol	56-81-5	200-289-5
European Inventor (EINECS) EC Inventory	y of Ex	Glycerol	56-81-5 Substances	200-289-5 Not Listed.
European Inventor (EINECS) EC Inventory	y of Ex	Glycerol isting Commercial Chemical S ances Control Act (TSCA) Inv	56-81-5 Substances	200-289-5 Not Listed. Not Listed.
European Inventor (EINECS) EC Inventory United States Toxic China Catalog of H	ry of Ex c Substa Iazardo	Glycerol isting Commercial Chemical S ances Control Act (TSCA) Inv	56-81-5 Substances	200-289-5  Not Listed.  Not Listed.  Not Listed.
European Inventor (EINECS) EC Inventory United States Toxio China Catalog of H New Zealand Inver	y of Ex c Substa lazardo	Glycerol isting Commercial Chemical S ances Control Act (TSCA) Involves chemicals 2015	56-81-5 Substances entory	Not Listed.  Not Listed.  Not Listed.  Not Listed.  Not Listed.
European Inventor (EINECS) EC Inventory United States Toxic China Catalog of H New Zealand Inver Philippines Inventor	y of Ex Substa lazardo itory of Ory of C	Glycerol isting Commercial Chemical S ances Control Act (TSCA) Involves chemicals 2015 Chemicals (NZIoC) Chemicals and Chemical Subst	56-81-5 Substances entory	Not Listed.  Not Listed.  Not Listed.  Not Listed.  Not Listed.  Not Listed.



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Chemical name	Common names and synonyms	CAS number	EC number		
Trisodium citrate	Sodium citrate	68-04-2	200-675-3		
European Invento (EINECS)	Not Listed.				
EC Inventory			Not Listed.		
<b>United States Toxi</b>	Not Listed.				
China Catalog of I	Not Listed.				
New Zealand Inve	New Zealand Inventory of Chemicals (NZIoC)				
Philippines Invent (PICCS)	Not Listed.				
Vietnam National	Chemical Inventory		Not Listed.		
Chinese Chemical IECSC)	Inventory of Existing Chemical Subs	stances (China	Not Listed.		





Chemical name	Comm	on names and synonyms	CAS number	EC number
Polyvinyl pyrrolidone		PVP40	9003-39-8	618-363-4
European Inventory (EINECS)	Not Listed.			
EC Inventory	Not Listed.			
<b>United States Toxic S</b>	Substanc	ces Control Act (TSCA) Inv	entory	Not Listed.
China Catalog of Ha	zardous	chemicals 2015		Not Listed.
New Zealand Inventor	ory of Cl	hemicals (NZIoC)		Not Listed.
Philippines Inventor (PICCS)	y of Che	micals and Chemical Subst	ances	Not Listed.
Vietnam National Cl	nemical ]	Inventory		Not Listed.
Chinese Chemical In IECSC)	ventory	of Existing Chemical Subst	tances (China	Not Listed.
Chemical nam	EC number			
Potassium dihydrogenorthophos	phate	Potassium dihydrogen phospha	te 7778-77-0	231-913-4
European Inventory (EINECS)	of Existi	ing Commercial Chemical S	Substances	Not Listed.
EC Inventory				Not Listed.
<b>United States Toxic S</b>	Substanc	es Control Act (TSCA) Inv	entory	Not Listed.
China Catalog of Ha	zardous	chemicals 2015		Not Listed.
New Zealand Invento	ory of Cl	nemicals (NZIoC)		Not Listed.
Philippines Inventor (PICCS)	y of Che	micals and Chemical Subst	ances	Not Listed.
Vietnam National Ch	nemical l	Inventory		Not Listed.
Chinese Chemical In IECSC)	ventory	of Existing Chemical Subst	ances (China	Not Listed.

#### 16. Other information

# **Abbreviations and acronyms**

CAS: Chemical Abstracts Service

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

RID: Regulation concerning the International Carriage of Dangerous Goods by Rail





IMDG: International Maritime Dangerous Goods IATA: International Air Transportation Association

TWA: Time Weighted Average STEL: Short term exposure limit LC50: Lethal Concentration 50%

LD50: Lethal Dose 50%

EC50: Effective Concentration 50%