

## Mouse COL4a1 ELISA Kit

**Cat#: orb776705 (MSDS)**

### 1. Identification

#### 1.1 GHS Product identifier

**Product name** ELISA test assay

#### 1.2 Other means of identification

**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), $\alpha$ -hydro- $\omega$ -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	200-675-3	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

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

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

<b>Component</b>	Sucrose		
<b>CAS No.</b>	57-50-1		
<b>Australia</b>		10 (1)	
<b>Belgium</b>		10	
<b>Canada - Ontario</b>		10	
<b>Canada - Québec</b>		10	
<b>France</b>		10	
<b>Ireland</b>		10	20 (1)
<b>New Zealand</b>		10 (1)	
<b>Singapore</b>		10	
<b>South Korea</b>		10	
<b>Spain</b>		10	
<b>USA - NIOSH</b>		10 total dust	
		5 respirable fraction	
<b>USA - OSHA</b>		15 inhalable aerosol	
		5 respirable aerosol	
<b>United Kingdom</b>		10	20
	<b>Remarks</b>		
<b>Australia</b>	(1) This value is for inhalable dust containing no asbestos and		
<b>Ireland</b>	(1) 15 minutes reference period		
<b>New Zealand</b>	(1) The value for inhalable dust containing no asbestos and less than 1% free silica.		

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

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



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

## 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/flammable 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 °C

**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/mL at 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

<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Water	Water	7732-18-5	231-791-2
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Sodium chloride	Sodium chloride	7647-14-5	231-598-3
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.

<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Sucrose	Sucrose	57-50-1	200-334-9
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.

<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Poly(oxy-1,2-ethanediyl), $\alpha$ -hydro- $\omega$ -hydroxy-Ethane-1,2-diol, ethoxylated	Poly (ethylene glycol) - 4000	25322-68-3	500-038-2
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Potassium sodium tartrate tetrahydrate	Potassium sodium tartrate tetrahydrate	6381-59-5	613-385-0
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.



<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Potassium chloride	Potassium chloride	7447-40-7	231-211-8
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
disodium hydrogen phosphate	disodium hydrogen phosphate	10039-32-4	600-088-6
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.



<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Glycerol	Glycerol	56-81-5	200-289-5
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.

<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Trisodium citrate	Sodium citrate	68-04-2	200-675-3
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Polyvinyl pyrrolidone	PVP40	9003-39-8	618-363-4
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.
<b>EC Inventory</b>			Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>			Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>			Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>			Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>			Not Listed.
<b>Vietnam National Chemical Inventory</b>			Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>			Not Listed.
<b>Chemical name</b>	<b>Common names and synonyms</b>	<b>CAS number</b>	<b>EC number</b>
Potassium dihydrogenorthophosphate	Potassium dihydrogen phosphate	7778-77-0	231-913-4
<b>European Inventory of Existing Commercial Chemical Substances (EINECS)</b>			Not Listed.

<b>EC Inventory</b>	Not Listed.
<b>United States Toxic Substances Control Act (TSCA) Inventory</b>	Not Listed.
<b>China Catalog of Hazardous chemicals 2015</b>	Not Listed.
<b>New Zealand Inventory of Chemicals (NZIoC)</b>	Not Listed.
<b>Philippines Inventory of Chemicals and Chemical Substances (PICCS)</b>	Not Listed.
<b>Vietnam National Chemical Inventory</b>	Not Listed.
<b>Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)</b>	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%