

MATERIAL SAFETY DATA SHEET

Not classified as dangerous according to criteria of
Australian National Occupational Health and Safety Commission

1 IDENTIFICATION OF MATERIAL AND SUPPLIER

Product: Human Retinol binding protein 4 (RBP4) ELISA kit

Recommended use: This product is laboratory research use only and is not intended for human or animal diagnostic, therapeutic or other clinical uses.

Supplier: ImmunoDiagnostics Limited. Address: 5/F, Biotech Centre 2, No. 11 Science Park West Avenue, Hong Kong Science Park, Shatin, N.T., Hong Kong

Technical assistance: antibody@hku.hk

Emergency phone number: Please contact your local Poison Control Centre
Australia - 131126
New Zealand - (0)34747000
United States - 1800 222 1222

Revision date: May 2011

Revision number: 1

2. INFORMATION ON PRODUCT/PREPARATION COMPOSITION

The product contains the following hazardous substances and those with the following highest permissible concentrations in the working environment:

2.1 Microtiter strips (96 wells, coated with anti-human RBP4 monoclonal antibody, sealed)

Identification numbers	Chemical name of substance	Concentrations	Risk and safety statements
CAS: None	None		
EC (EINECS): None			

2.2 Human RBP4 standard and control (recombinant protein, human RBP4, lyophilised)

Identification numbers	Chemical name of substance	Concentrations	Risk and safety statements
CAS: None	None		
EC (EINECS): None			

2.3 HRP Labeled Antibody Solution (anti-human RBP4 monoclonal antibody, HRP conjugate, in phosphate buffer solution)

Identification numbers	Chemical name of substance	Concentrations	Risk and safety statements
CAS: None	None		
EC (EINECS): None			

2.4 Assay buffer concentrate

Identification numbers	Chemical name of substance	Concentrations	Risk and safety statements
CAS: None	None		
EC (EINECS): None			

2.5 Wash buffer concentrate

Identification numbers	Chemical name of substance	Concentrations	Risk and safety statements
CAS: None	None		
EC (EINECS): None			

2.6 Substrate solution

Identification numbers	Chemical name of substance	Concentrations	Risk and safety statements
CAS: 54827-17-7	3,3',5,5'-Tetramethylbenzidine	0.4 g/L	R20/21/22-36/37/38-40, S26-36/37
EC (EINECS): 259-364-6			

2.7 Stop solution

Identification numbers	Chemical name of substance	Concentrations	Risk and safety statements
CAS: 7664-93-9	Sulfuric acid	2 N	C, R35, S26-30-45
EC (EINECS): 231-639-5			

Risk symbols

C Corrosive

Risk phrases

R20/21/22 Harmful by inhalation, in contact with skin and if swallowed

R21/22 Harmful in contact with skin and if swallowed

R22 Harmful if swallowed

R35 Causes severe burns

R36/37/38 Irritating to eyes, respiratory system and skin

R40 Possible risk of irreversible effects

Safety phrases

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S30 Never add water to this product

S36/37 Wear suitable protective clothing and gloves

S45 In case of accident or if you feel unwell, seek medical advice immediately (show label where possible)

3. SUBSTANCE/PREPARATION HAZARDS DATA

The amount of dangerous substance is under the limit on which the kit is considered dangerous as a whole.

When used, the most adverse impacts of the substance/preparation on human health include:

The followed components can damage health if ingested and/or can irritate eyes and skin: Stop solution, Substrate A and B solutions.

4 FIRST AID MEASURES

Eye Contact:

Check for and remove contact lenses. Flush eyes with water for at least 15 minutes. Get medical attention.

Skin contact:

Wash skin thoroughly with soap and water. Remove and wash contaminated clothing. Should irritation occur get medical attention.

Inhalation:

If inhaled remove to fresh air. If breathing is affected seek medical attention.

Ingestion:

Flush out mouth and drink large amounts of water. Seek medical attention if symptoms appear.

Wounds:

Allow to bleed freely. Wash thoroughly with soap and water. Get medical attention.

5 FIRE FIGHTING MEASURES

Suitable fire-extinguishing media: Carbon dioxide, dry powder, foam, water.

Thermal decomposition: No thermal decomposition degradation products are expected.

Special hazards: None.

Special protective means for firemen: None.

6 ACCIDENTAL RELEASE MEASURES

Safety measures to protect humans: Avoid contact with skin and eyes.

Environmental safety measures: Avoid penetration into sewerage systems, surface and ground water. Avoid soil pollution.

Recommended cleaning and disposal methods: Cover with suitable absorbing material. After removing the substance, rinse the spot of spilling thoroughly with water and soap.

7 HANDLING AND STORAGE

Handling instructions: Avoid contact with skin, eyes and clothing. Use suitable protective means to work with the substance.

Storage instructions: Store at temperatures between + 2 and + 8°C in a dry and dark place.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Technical measures: Do not eat, drink and smoke when working with the kit. Use the kit only in rooms enabling good ventilation. Local exhaustion is necessary, general (forced) exhaustion is recommended.

Personal protective means – protection of respiratory organs: None

Personal protective means – eye protection: None

Personal protective means – hand protection: Protective gloves (wash your hands before and after work)

Personal protective means – body protection: Protective clothing

9 PHYSICAL AND CHEMICAL PROPERTIES

State (at 20°C):

Solid: Microtiter strips.

Liquids: RBP4 standard, HPR labeled antibody Solution, Assay buffer concentrate, Wash buffer concentrate, Substrate solution, Stop solution.

Colour:

Colorless: RBP4 standard, HRP labeled antibody Solution, Assay buffer, Stop solution, Wash buffer concentrate, Substrate solution.

pH value (at 25°C): Stop solution: < 1

Others: 6.8 - 7.4

10 STABILITY AND REACTIVITY

Conditions to be avoided: Heat

Substances and materials with which the product is not allowed to get in touch: Acids

Hazardous decomposition products: Not known

11 TOXICOLOGICAL INFORMATION**Toxicological information**

The product contains sulphuric acid in total concentration of 2N.

Acute toxicity-LD50 orally, rat (mg/kg): 2140mg/kg - sulphuric acid

Irritability: No data available

Mutagenicity: No data available

Reproduction toxicity: No data available

Tests on animals: No data available

12 ECOLOGICAL INFORMATION

Water hazard class: 2 (water-damaging substances)

13 DISPOSAL CONSIDERATIONS**The manner of disposing the substance/preparation:**

Mix or dissolve the material in a combustible solvent and burn up in a facility whose equipment matches all regulations in effect. Every waste disposal must be carried out in coincidence with national and local legislation or administrative regulations respectively.

14 TRANSPORT INFORMATION

Overland transportation (ADR/RID): As a mixture, the substance is subject to no limitations.

Transatlantic transportation (IMDG): As a mixture, the substance is subject to no limitations.

Air transportation (ICAO/IATA): As a mixture, the substance is subject to no limitations.

15. INFORMATION ON LEGAL REGULATIONS

According to the Act No. 356/2003 Coll. on chemical substances and chemical preparations and on amendments in some other laws and acts, components contained in the Human RBP4 ELISA are non-hazardous substances in said concentrations.

Human RBP4 ELISA kit is subject to special marking regulations according to the EC regulations (28/10/1999).

Human RBP4 ELISA:

R20/21/22-21/22-22-35-36/37/38-40

S26-30-36/37-45

16 OTHER INFORMATION

The material safety data sheet contains data necessary to ensure safety and health and environmental protection in working with chemical substances. The above-stated data match the contemporary state of knowledge and experience and are in coincidence with legal regulations currently in effect. This product is a chemical substance and can be solely used by persons with chemical education at their own risk.

Human RBP4 ELISA is designed for biomedical research. The manufacturer has no responsibility for damage caused by unsuitable use and by disrespecting the enclosed working instructions.

The above-stated information cannot be considered as complete and must be understood to be only a methodical instruction.