

MATERIAL SAFETY DATA SHEET

IMPORTANT INFORMATION: Please read carefully

MSDS: HK330

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1. Chemical Product and Company Identification

The kit is to be used for the *in vitro* quantities determination of protein in serum, plasma, urine, BALF or other samples. The results of the kit can only be used for research purposes.

Manufacturer: Hycult Biotech
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2. Hazards Identification

None of the hazardous reagents are present in an amount that qualifies the products as hazardous according to Directive 67/548/EC.

However, ingestion or exposure to large amounts can potentially be hazardous.

3. Composition / Information on Ingredients

No single component of the kit contains a hazardous ingredient in an amount that requires labeling. The contents in the components of ingredients listed as hazardous are given below:

- * Vial concentrated Wash buffer (20 ml or 40ml), containing tween 20; preservative 2-chloroacetamide¹⁾.
- * Vial concentrated Dilution buffer (A or B) (5 or 10 ml), protein stabilized buffer; preservative 2-chloroacetamide¹⁾.
- * Vial Standard²⁾, recombinant protein or plasma in protein stabilized buffer; preservative 2-chloroacetamide¹⁾.
- * Vial lyophilized Tracer: biotinylated antibody in protein stabilized buffer; preservative 2-chloroacetamide¹⁾.
- * Vial lyophilized Streptavidin-peroxidase conjugate in protein stabilized buffer; preservative 2-chloroacetamide¹⁾.
- * Vial TMB substrate (20 ml), containing 0.4 g/l of 3, 3', 5, 5'-Tetramethylbenzidine in an organic base.
- * Vial Stop solution (20 ml), containing Oxalic Acid 2.0%³⁾.
- * 96 –wells Microtiter plate coated with antibody (12 strips).

*The presence of the components will differ per ELISA kit, see manual for the components present.

Detailed information regarding ingredients of components which may be found as hazardous:

¹⁾ 2-Chloroacetamide: Some indicated vials contain a small quantity of 2-chloroacetamide. Total amount: 0.02 %.

²⁾ The Standard can be of human origin. It was tested for various viruses and found negative. Since no test method can offer complete assurance that infectious agents are absent, this reagent should be handled as any potentially infectious human serum or blood specimen. Handle all materials in contact with this reagent according to guidelines for prevention of transmission of blood-borne infections.

³⁾ Stop solution contains Oxalic Acid, 2.0%.

4. First Aid Measures

General instructions: First aid personnel should ensure self protection. Immediately rinse with plenty of water.

If inhaled: Transport affected person into the open air. Apply mechanical ventilation and if necessary apply an oxygen mask. When irritation persists, seek medical advice.

If ingested: Rinse the mouth and drink plenty of water. In case of unconsciousness, never administer anything orally. Arrange medical advice immediately.

In case of contact with eyes: Rinse out with plenty of water with eyes held open for at least 15 minutes. When irritation persists, seek medical advice.

In case of contact with skin: Wash with plenty of water. Immediately remove contaminated clothes. When irritation persists, seek medical advice.

5. Fire-fighting Measures

Use water spray, dry sand, carbon dioxide or foam depending on the surrounding equipment and materials.

No thermal decomposition degradation products or hazards are expected. Ambient fire may liberate hazardous vapors.

6. Accidental release measures

Personal precautions: Avoid direct contact. Do not inhale aerosols or vapors. Immediately change contaminated clothing.

Environmental safety measures: Avoid penetration into sewerage system, surface and ground water. Avoid soil pollution. See also 12. Ecological Information.

Cleaning procedure: Cover with a suitable amount of liquid-absorbent material. After removing the substance, clean the contaminated area and disinfect.

7. Handling and Storage

For optimal performance of the kit, it is recommended to work according to Good Laboratory Practice (GLP).

Store kit at 2° C to 8° C. Do not freeze. See product information & manual for additional information concerning individual reagents. Avoid prolonged exposure to light.

8. Exposure controls / Personal Protection

Personal Protection: Protective clothing should be selected specifically for the working place.

Respiratory protection: none

Eye protection: none

Skin protection: Wash hand before and after work. Wear a laboratory coat and protective gloves.

9. Physical and Chemical Properties

<u>Appearance:</u>	Liquid and lyophilized
<u>Color:</u>	Colorless: Wash buffer, Wash/ Dilution buffer, Binding buffer, Plasma diluent, Stop solution, TMB substrate White: Lyophilized Standard, Tracer, HRP labeled Conjugate Yellow-orange: Lyophilized Standard, Plate activation buffer, Plasma diluent, Dilution buffer, Lyophilized Streptavidin peroxidase conjugate, HRP labeled Conjugate
<u>Odor:</u>	Odorless
<u>pH:</u>	Neutral, except the vial with Stop solution, pH 2-3 and dilution buffer A and B pH4.7
<u>Solubility:</u>	Soluble in demineralized or de-ionized water
<u>Boiling point:</u>	Not Available (NA)
<u>Evaporation rate:</u>	NA
<u>Explosive properties:</u>	NA
<u>Flash point:</u>	NA
<u>Flammability:</u>	NA
<u>Oxidizing properties:</u>	NA
<u>Relative density:</u>	NA
<u>Vapor density:</u>	NA
<u>Vapor pressure:</u>	NA
<u>Viscosity:</u>	NA
<u>Additional parameters:</u>	NA

10. Stability and Reactivity

Products are stable if handled according to mentioned storage temperatures and conditions and before the mentioned expiry date. Use only clean glass and plastics (polypropylene) suitable for laboratory use.

Conditions to be avoided are freezing and heating above temperatures mentioned in the manual.

Materials to avoid: Do not use other plastics than recommended. Hazardous decomposition of products is not known.

11. Toxicological Information

The kit components are in small sizes with a concentration below the acceptable limit for hazardous ingredients, the toxicological risk is minimal.

No toxicological experiments have been performed on the kit components.

12. Ecological Information

The kit components are in small sizes with a concentration below the acceptable limit for hazardous ingredients, the ecological risk are minimal.

The stop solution must be neutralized or diluted before entering the sewage.

13. Disposal Considerations

Please notice the standard, positive and negative control are of human origin.

The product and packaging must be disposed in compliance with the respective national regulations. Observe all Federal, State and Local laws concerning health and pollution.

14. Transport Information

There are no special transport regulations (ADR/RID (road/rail), IMDG (sea), ICAO/IATA (air)).

15. Regulatory Information

No single component contains a hazardous ingredient in an amount that requires identification and labelling according to EC directives.

16. Other Information

The information provided is believed to be correct and is intended as a guide to users. **Hycult® Biotech** will not be held responsible for any damages which may result from the use, handling or contact with above mentioned products.

Read instructions carefully prior to use. GLP is required.

For research use only. Not for use in or on humans or animals or for diagnostics.

Specific MSDS for a particular kit is available upon request using the request form in our support section at www.hycultbiotech.com.