

# Product Information

## **Hantaan Virus Set**

Concentrated liquid antigen produced *in vitro* with coordinating cell line control antigen

Catalog Number **BR81016S**

Synonyms: Hantaan

## **Product Description**

Hantaan virus is a single stranded RNA virus that belongs to the *Bunyaviridae* family. Wild and laboratory rodents are hosts for Hantaan virus and other related hantaviruses. All hantaviruses are zoonotic.<sup>1</sup>

Transmission occurs by direct contact with feces, urine, and saliva from infected animals, as well as by aerosol inhalation of feces, urine, or saliva particulates.<sup>2</sup>

Liquid antigen for Hantaan virus is produced in Vero E6 cells. Viral proteins are harvested from cell cultures and inactivated before handling for serological applications.

This product has been tested in ELISA applications. When diluted sera is added to test wells coated with liquid antigen and control antigen, antibodies to hantavirus antigens will only bind in the antigen-coated wells. Labeled conjugate antibody will then allow for the detection of these antibodies through a chromogenic reaction with a substrate.

## **Reagents**

Supplied as frozen liquid.

Hantaan Liquid Antigen contains viral and cellular proteins in TNE Buffer (50 mM Tris, 140 mM NaCl, 5 mM EDTA, pH 7.5)

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Cell Line Control Antigen for Hantaan contains only cellular proteins in TNE Buffer (50 mM Tris, 140 mM NaCl, 5 mM EDTA, pH 7.5)

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## **Precautions and Disclaimer**

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

This product is not intended to be used as a diagnostic product.

## **Storage/Stability**

Store in a non-cycling freezer at -60°C or below. Storage temperature of -80°C is preferable. Avoid repeated freezing and thawing, as product degradation may result. Coated plates can be sealed and frozen at -80°C ± 20°C for up to 6 months.

## **Procedure**

**Note:** Recommended dilutions are provided on the lot specific Certificates of Analysis.

1. Dilute antigen in Coating Buffer at recommended dilution and plate 100 µL per well in odd-numbered columns of the Immunoassay plate.
2. Dilute control antigen in Coating Buffer at recommended dilution and plate 100 µL per well in even-numbered columns of the Immunoassay plate.
3. Cover the plate and incubate overnight at 4°C.
4. Aspirate liquid from all wells.
5. Wash plate three times with wash buffer.
6. Dilute controls to appropriate working dilution.
7. Also prepare 1:50 dilutions of test samples.
8. Add 100 µL of diluted controls and diluted samples to appropriate wells.
9. Incubate the plate, covered, at 37°C for 1 hour.
10. Aspirate liquid from all wells
11. Wash plate three times with wash buffer.
12. Add 100 µL per well of conjugate antibody diluted according to manufacturer's recommendations.
13. Incubate the plate, covered, at 37°C for 1 hour.
14. Aspirate liquid from all wells
15. Wash plate three times with wash buffer.
16. Add 100 µL per well of chromogen substrate according to the manufacturer's recommendations.
17. Read the plate after the positive control reaches the desired net OD value.

**Note:** In order to obtain best results in different techniques and preparations we recommend determining cut-off values through the evaluation of known negative and positive samples.

### Recommended Reagents

- Coating Buffer: Carbonate/bicarbonate buffer (0.035 M NaHCO<sub>3</sub>; 0.016 M Na<sub>2</sub>CO<sub>3</sub>)
- Plate Type: Immulon 1B Flat Bottom 96-well Immunoassay Plate
- Wash Buffer: 0.15 M NaCl in Reagent Grade/Distilled H<sub>2</sub>O + 0.2% TWEEN® 20
- Conjugate Antibody: Goat Anti-Rodent (appropriate species) IgG-Peroxidase

### References

1. *Manual of Microbiologic Monitoring of Laboratory Animals*, 2<sup>nd</sup> Edition. NIH Publication No. 94-2498; 1994. 226 pp.
2. *Infectious Diseases of Mice and Rats*. National Research Council. Washington D.C.: National Academy Press; 1991. 397 pp.

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