SIGMA-ALDRICH®

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Product Information

Ectromelia Set

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

Catalog Number BR81024S

Synonyms: Mousepox virus, ECTV

Product Description

Ectromelia virus is a double stranded DNA virus that belongs to the Poxviridae family. Mice are the natural hosts of Ectromelia virus, though rats may be transiently infected under experimental conditions.¹

Transmission is by direct contact and fomites, entering the rodent's body through scratches or other broken skin.¹

Liquid antigen for Ectromelia virus is produced in LLC-MK2 cells. Viral proteins are harvested from cell cultures and inactivated during processing through the use of detergents.

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 Ectromelia antigen 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.

Ectromelia Liquid Antigen contains viral and cellular proteins in borate saline (50 mM boric acid, 140 mM NaCl, 24 mM NaOH, pH 9.0) with 1% Triton™-X 100. Catalog No. BR81024

Cell Line Control Antigen for Ectromelia contains only cellular proteins in borate saline (50 mM boric acid, 140 mM NaCl, 24 mM NaOH, pH 9.0) with 1% Triton-X 100. Catalog No. BR81024C

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 \pm 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.
- 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 for one hour at 37°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

- <u>Coating Buffer</u>: Carbonate/bicarbonate buffer (0.035 M NaHCO₃; 0.016 M Na₂CO₃)
- <u>Plate Type</u>: Immulon 1B Flat Bottom 96-well Immunoassay Plate
- <u>Wash Buffer</u>: 0.15 M NaCl in Reagent Grade/Distilled H₂O + 0.2% TWEEN[®] 20
- <u>Conjugate Antibody</u>: Goat Anti-Rodent (appropriate species) IgG-Peroxidase

References

 Baker, DG. Natural Pathogens of Laboratory Animals: Their Effects on Research. Washington D.C.: ASM Press; 2003. 385 pp

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