SIGMA-ALDRICH®

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Product Information

Polyoma Set

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

Catalog Number BR81032S

Synonyms: Mouse Polyoma Virus, Polyoma, Poly

Product Description

Polyoma is a double stranded DNA virus that belongs to the *Papovaviridae* family, genus *Polyomavirus*. Mice are the natural hosts of Polyoma, though infection can be achieved experimentally in other species, such as rat and hamster. Transmission occurs by the nasal route.¹

Liquid antigen for Polyoma virus is produced in 3T6-Swiss Albino 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 Polyoma 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.

Polyoma Liquid Antigen contains viral and cellular proteins in 25% DMEM, 20% iodixanol and phosphate buffered saline. Catalog No. BR81032

Cell Line Control Antigen for Hantaan contains only cellular proteins in 25% DMEM and phosphate buffered saline.

Catalog No. BR81032C

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±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 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

- <u>Coating Buffer</u>: Carbonate/bicarbonate buffer (0.035 M NaHCO₃; 0.016M Na₂CO₃)
- Plate Type: 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

 Manual of Microbiologic Monitoring of Laboratory Animals, 2nd Edition. NIH Publication No. 94-2498; 1994. 226 pp.

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