

Product No. A-3427

Anti-Acyclovir

Developed in Rabbit

Lot 103H8892

Acyclovir (acycloguanosine, (9-[(2-hydroxyethoxy)-methyl]-guanine, Zovirax) is a guanosine analog that has been shown to be effective in inhibiting viral activity.

Acyclovir antiserum is developed in rabbit using an Acyclovir-KLH (keyhole limpet hemocyanin) conjugate as the immunogen. The antiserum has been characterized using two immunoassay methodologies: 1) radioimmunoassay (RIA) using tritiated Acyclovir (Acyclovir-³H) and 2) enzyme immunoassay (EIA) using acyclovir conjugated to horseradish peroxidase (Acyclovir-HRP).

Rabbit Anti-Acyclovir antiserum is offered as a preservative free lyophilized powder. Each vial contains 10 mmoles phosphate, 10 mg lactose, 200 - 400 µg of rabbit serum proteins and sufficient antiserum to acyclovir for the number of tests shown in the table below.

Method	Product No.	Minimum Tests	Assay Range (ng/ml)
RIA	A-7678	100	1.0 - 25
EIA	A-3177	1000	0.5 - 160

The anti-acyclovir antiserum is used in a double antibody competitive binding immunoassay in which an Acyclovir-tracer and unlabeled Acyclovir (standard or unknown sample) compete for a limited number of combining sites present in the rabbit antiserum to acyclovir. Separation of the bound and free Acyclovir-tracer is accomplished using a specific immunoprecipitation reagent containing goat anti-rabbit IgG antiserum. The ratio of bound Acyclovir-tracer in the presence of acyclovir to that bound without Acyclovir is inversely proportional to the concentration of Acyclovir.

Specific Performance Characteristics

Specific performance characteristics are methodology dependent. See the individual Acyclovir tracer product insert.

Cross-Reactivity

The specificity of the anti-acyclovir antiserum in the table below was determined using the Acyclovir-3H RIA by calculating the ratio of the moles of Acyclovir to moles of Acyclovir analog at the 50% intercept of the respective dose response curves and multiplying the result by 100%.

<u>Analog</u>	<u>%</u>
Guanine	0.033
Guanosine	0.002
Cyclic guanosine monophosphate	0.002
Ganciclovir	3.402
Dideoxyinosine	0.002
Adenosine	0.001

Reconstitution

Rabbit Anti-Acyclovir antiserum should be reconstituted with 10 ml of the appropriate assay buffer. Refer to individual Acyclovir tracer product inserts for instructions for dilution to assay strength and proper storage of the antisera. Since the antisera is preservative free, it is recommended that the antisera be reconstituted in the presence of a preservative or aliquoted and frozen. Avoid repeated freeze/thaw cycles.

References

Schaeffer, H.J., et al., Nature, **272**, 583 (1978).
Quinn, R.P., et al, Analytical Biochemistry, **98**, 319 (1979).

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