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Product Information

ANTI-DIDEOXYINOSINE (ddl) Developed in Rabbit

Product No. **D9039**

Antiserum to ddl

Dideoxyinosine (ddl, 2',3'-dideoxyinosine) is an inosine analog that has been shown to be effective in inhibiting retroviral activity.

Dideoxyinosine antiserum is developed in rabbits using ddl-1-valeryl-BSA conjugate as the immunogen. The antiserum has been characterized by radioimmunoassay (RIA) using tritiated ddl (ddl-³H).

The dideoxyinosine antiserum is offered as a preservative free lyophilized powder. Each vial contains 10mmoles phosphate, 10mg lactose, 1.5-3.0 mg rabbit serum proteins and sufficient antiserum for 100 RIA tests as described in the ddl-³H product data sheet (Sigma Product No. D8914).

The ddl antiserum is used in double antibody competitive binding immunoassay in which ddl-³H and unlabeled ddl (standard or unknown sample) compete for a limited number of combining sites present in the rabbit antiserum to ddl. Separation of the bound and free ddl-³H is accomplished using a specific immunoprecipitation reagent containing goat antiserum to rabbit IgG. The ratio of bound ddl-³H in the presence of ddl to that bound without ddl is inversely proportional to the concentration of unlabeled ddl.

Specific Performance Characteristics

Specific performance characteristics are methodology dependent. See the ddl-³H product insert or call Sigma Technical Service at 1-800-325-5832 for more information.

Cross Reactivity

The specificity of the ddl antiserum was determined by calculating the ratio of the moles of ddl to moles of ddl analog at the 50% intercept of the respective dose response curves and multiplying the result by 100%.

Analog	%
Dideoxyadenosine	0.537
Inosine	<0.001
Adenosine	<0.001
Hypoxanthine	0.002
Uric Acid	<0.001
Caffeine	<0.001

Reconstitution and Storage

The ddl antiserum should be reconstituted with 10ml of the appropriate assay buffer. Since the antiserum is preservative free, it is recommended that it be reconstituted in the presence of a preservative or aliquoted and frozen. Avoid repeated freeze/thaw cycles.

Note: Thimerosal should not be used as a preservative.

References

Krogstad, D., et al., Sixth International Conference on AIDS, 1990.
Mitsuya, H., and S. Broder, Proc. Natl. Acac. Sci. USA, **83**, 1911-1915 (1986).
Yarchoan, R., et al., Science, **245**, 412-415 (1989).

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