

**Product No. D-1787**  
**Anti-Dideoxycytidine (ddC)**  
**Developed in Rabbit**  
For Immunoassay

**Lot** 043H8882

Dideoxycytidine (ddC, 2',3'-dideoxycytidine) is a cytidine analog that has been shown to be effective in inhibiting retroviral activity.

Dideoxycytidine antiserum is developed in rabbit using ddC-N<sup>4</sup>-BSA conjugate as the immunogen. The antiserum has been characterized by radioimmunoassay (RIA) using tritiated ddC (ddC-<sup>3</sup>H).

The dideoxycytidine antiserum is offered as a preservative free lyophilized powder. Each vial contains 10 mmoles phosphate, 10 mg lactose, 3-6 mg of rabbit serum proteins and sufficient antiserum for 100 RIA tests as described in the ddC-<sup>3</sup>H product data sheet (Sigma Product No.

D-0914).

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

#### **Specific Performance Characteristics**

Specific performance characteristics are methodology dependent. See the ddC-<sup>3</sup>H product

insert or call Sigma Immunochemicals Technical Service at 1-800-262-9141 for more information.

#### **Cross Reactivity**

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

<b>Analog</b>	<b>%</b>
Cytidine	0.010
2'-Deoxycytidine	0.120
2',3'-Dideoxyuridine	4.105

#### **Reconstitution and Storage Instructions**

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

#### **Reference**

Mitsuya, H., and S. Broder, Proc. Natl. Acad. Sci. USA, **83**, 1911-1915 (1986).

Sigma warrants that its products conform to the information contained in this and other Sigma publications. Purchaser must determine the suitability of the products for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.

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