

Product Data Sheet

Product Name: surface antigen (208-215) [Hepatitis B Virus]

Cat. No.: GP10068

Chemical Properties

Cas. No.

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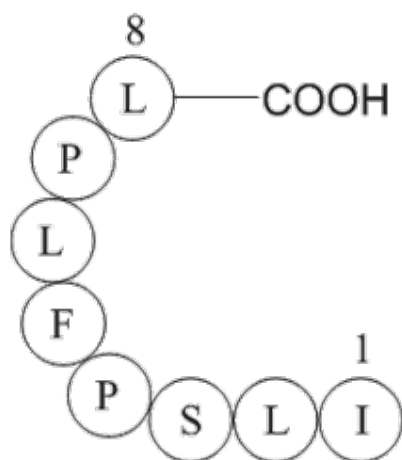
Formula $C_{46}H_{74}N_8O_{10}$ M.Wt 899.13

Solubility $\geq 89.9\text{mg/mL}$ in DMSO Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

The nucleocapsid of hepatitis B virus is covered by an envelope of HBV surface antigen (HBsAg), which has the common, group-specific determinant a. The four major subtypes of HBsAg, adw, adr, ayw and ayr, are generated, and they have been proposed to represent the phenotypic expression of the four major genotypes of HBV¹. HBsAg subtypes show distinct geographical distributions² and may provide historical information on the migration of ancestors carrying HBV of a

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particular subtype³.

The HBsAg, localized on the surface of the infectious Dane particle is considered to be the antigen responsible for conferring immunity to infection with hepatitis B⁴. A larger amount is found on filaments of 20-nm diameter and variable length. By far the most HBsAg is present on small, noninfectious, 20-nm particles⁵.

References:

1. Le Bouvier, G. L., McCollum, R. W., Hierholzer, W. J., Irwin, G. R., Krugman, S. & Giles, J. P. (1972). Subtypes of Australia antigen and hepatitis-B virus. *Journal of the American Medical Association* 222, 928-930
2. Courouche-Pauty, A. M., Plancon, A. & Soulier, J. P. (1983). Distribution of HBsAg subtypes in the world. *Vox sanguinis* 44, 197-211.
3. Yamashita, Y., Kurashina, S., Miyakawa, Y. & Mayumi, M. (1975). South-to-north gradient in distribution of the r determinant of hepatitis B surface antigen in Japan. *Journal of Infectious Diseases* 131, 567-569.
4. A. M. Moriarty, B. H. Hoyer *et al.* Expression of the hepatitis B virus surface antigen gene in cell culture by using a simian virus 40 vector. *Proc. Natl. Acad. Sci.* 78: 2606-2610 (1981).

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