

## Product Data Sheet

Product Name: vitamin D binding protein precursor (208-218) [Homo sapiens]/[Oryctolagus cuniculus]  
 Cat. No.: GP10019

### Chemical Properties

Cas. No.

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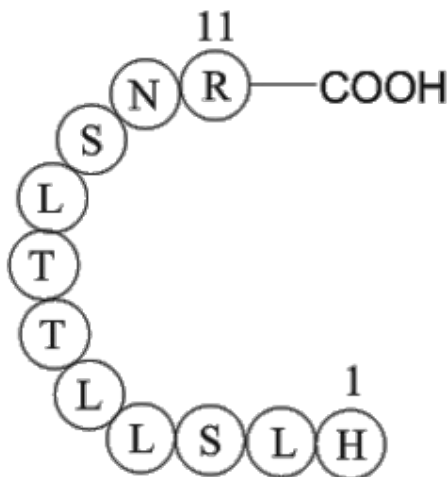
Formula  $C_{54}H_{95}N_{17}O_{17}$  M.Wt 1254.44

Solubility  $\geq 125.4\text{mg/mL}$  in DMSO Storage Store at  $-20^{\circ}\text{C}$

General tips For obtaining a higher solubility, please warm the tube at  $37^{\circ}\text{C}$  and shake it in the ultrasonic bath for a while. Stock solution can be stored below  $-20^{\circ}\text{C}$  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

Vitamin D-binding protein (DBP) is a multifunctional, highly expressed, polymorphic serum protein[1][2]. Since its identification in 1959, many important functions of Vitamin D binding protein have been discovered. These range from the transport of vitamin D metabolites to possible roles in the immune system and host defense[3]. The molecular weight range, time course of appearance, and effect of

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dietary strontium all suggested that the newly appearing protein( band C) might represent the calcium binding protein formed in response to vitamin D. Using chromatographically purified calcium binding protein from rat intestine, it was shown that this protein(band C) most probably is the calcium binding protein. The major contaminating protein in the final purification of rat calcium binding protein has also been identified on gels as the preexisting protein (band A), which is probably the precursor of the calcium binding protein.[4].

### References:

- [1] N.E. Cooke, J.G. Haddad, Vitamin D binding protein (Gc-globulin), Endocr. Rev., 10 (1989), pp. 294-307
- [2] N.E. Cooke, J.G. Haddad, Vitamin D binding protein (Gc-globulin): update 1995, A. Negro-Vilar, D.D. Bikle (Eds.), Endocrine Reviews Monographs: 4. Hormonal Regulation of Bone Mineral Metabolism, The Endocrine Society (1995), pp. 125-128
- [3] Peter White, Nancy Cooke, pThe Multifunctional Properties and Characteristics of Vitamin D-binding Proteinq, Volume 11, Issue 8, 1 October 2000, Pages 320-327.
- [4] H. F. DeLuca , D. Drescher, Possible precursor of vitamin D-stimulated calcium binding protein in rats, Biochemistry, 1971, 10 (12), pp 2308-2312 , DOI: 10.1021/bi00788a020, Publication Date: June 1971.

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