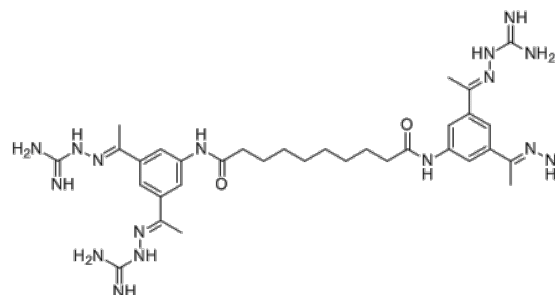


**Product Name** : Semapimod hydrochloride  
**Cat. No.** : PC-61901  
**CAS No.** : 164301-51-3  
**Molecular Formula** : C<sub>34</sub>H<sub>56</sub>Cl<sub>4</sub>N<sub>18</sub>O<sub>2</sub>  
**Molecular Weight** : 890.746  
**Target** : Toll-like Receptor (TLR)  
**Solubility** : 10 mM in DMSO



## Biological Activity

Semapimod (CNI-1493, AXD-455) is a tetravalent guanyldiazide that acts as a selective inhibitor of cytokine-inducible arginine transport and NO production, inhibits **TLR4** signaling (IC<sub>50</sub>=0.3 uM) by targeting the TLR chaperone **gp96**. Semapimod does not inhibit EDRF activity, inhibits nitric oxide synthesis by inflammatory macrophages. Semapimod prevents the development of carrageenan-induced footpad inflammation, and conferred protection against lethal LPS challenge in mice.

## References

- Bianchi M, et al. *Mol Med.* 1995 Mar;1(3):254-66.  
Bianchi M, et al. *J Exp Med.* 1996 Mar 1;183(3):927-36.  
Cohen PS, et al. *Proc Natl Acad Sci U S A.* 1996 Apr 30;93(9):3967-71.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

E-mail: tech@probechem.com