

Data Sheet

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 Product Name
 :
 Semapimod

 Cat. No.
 :
 PC-61902

 CAS No.
 :
 352513-83-8

 Molecular Formula
 :
 C₃₄H₅₂N₁₈O₂

 Molecular Weight
 :
 744.914

Target : Toll-like Receptor (TLR)
Solubility : 10 mM in DMSO

Biological Activity

Semapimod (CNI-1493, AXD-455) is a tetravalent guanylhydrazone that acts as a selective inhibitor of cytokine-inducible arginine transport and NO production, inhibits **TLR4** signaling (IC50=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.

Wang J, et al. *J Immunol*. 2016 Jun 15;196(12):5130-7.

Dotan I, et al. *Gut.* 2010 Jun;59(6):760-6.

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

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