

## Abetimus

Cat. No.:	HY-148411
CAS No.:	167362-48-3
Molecular Formula:	C <sub>1632</sub> H <sub>2100</sub> N <sub>610</sub> O <sub>97</sub> P <sub>156</sub> S <sub>4</sub>
Molecular Weight:	50742.05
Target:	Others
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

# Abetimus

### BIOLOGICAL ACTIVITY

<b>Description</b>	Abetimus (LJP 394 free base) is an immunosuppressant consisting of four double-stranded DNA (dsDNA) oligonucleotides. Abetimus is capable of crosslinking anti-dsDNA antibodies on the surface of B cells, and decreases anti-dsDNA antibodies levels. Abetimus has the potential for research of systemic lupus erythematosus <sup>[1]</sup> .
<b>In Vitro</b>	Administration of Abetimus (LJP 394 free base) is thought to reduce circulating anti-dsDNA Abs by at least two mechanisms. First, Abetimus (LJP 394 free base) acutely depletes circulating anti-dsDNA antibodies, presumably by forming small, soluble complexes that do not appear to result in significant activation of the complement system. Second, Abetimus (LJP 394 free base) binds B cells without T-cell activation, resulting in their apoptosis and reduced anti-dsDNA antibody production. In fact, Abetimus (LJP 394 free base) appears to induce B-cell tolerance by crosslinking anti-dsDNA surface immunoglobulin receptors on B cells and triggering the signal transduction pathways that lead to B-cell anergy or apoptosis <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	Abetimus (LJP 394 free base) proves effective in suppressing anti-dsDNA-mediated pathologies in male BXSB mice, a model for systemic lupus. Mice dosed with Abetimus (3-300 µg/mouse) i.v. twice weekly, starting around nine weeks of age, has significantly lower titers of anti-dsDNA, lower numbers of anti-dsDNA-secreting spleen cells and less adverse renal histopathology than control mice <sup>[2]</sup> . Abetimus has a pharmacokinetic half-life ranging from 40 min to 1 h in mice <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Marta Mosca, et al. LJP-394 (abetimus sodium) in the treatment of systemic lupus erythematosus. *Expert Opin Pharmacother.* 2007 Apr;8(6):873-9.

[2]. S M Coutts, et al. Pharmacological intervention in antibody mediated disease. *Lupus.* 1996 Apr;5(2):158-9.

---

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA