PRODUCT INFORMATION



GS-9620

Item No. 19628

CAS Registry No.: 1228585-88-3

Formal Name: 4-amino-2-butoxy-7,8-dihydro-8-

[[3-(1-pyrrolidinylmethyl)phenyl]

methyl]-6(5H)-pteridinone

Synonym: Vesatolimod MF: $C_{22}H_{30}N_6O_2$ FW: 410.5 Purity: ≥98%

UV/Vis.: λ_{max} : 214, 282 nm Supplied as: A crystalline solid

-20°C Storage: Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

GS-9620 is supplied as a crystalline solid. A stock solution may be made by dissolving the GS-9620 in the solvent of choice. GS-9620 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of GS-9620 in these solvents is approximately 15 and 1 mg/ml, respectively.

GS-9620 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, GS-9620 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. GS-9620 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

GS-9620 is an orally available agonist of toll-like receptor 7 (TLR7; $EC_{50} = 291$ nM) with 30-fold selectivity over TLR8 (EC $_{50}$ = 9 μ M). It has been shown to stimulate a TLR7 immune response in two different animal models of chronic hepatitis B infection and to inhibit HIV-1 infection in human peripheral blood mononuclear cells.2-4

References

- 1. Turnas, P., Zheng, X., Lu, B., et al. Preclinical characterization of GS-9620, a potent and selective oral TLR7 agonist. J. Hepatol. 54, S446-S447 (2011).
- Menne, S., Tumas, D.B., Liu, K.H., et al. Sustained efficacy and seroconversion with the toll-like receptor 7 agonist GS-9620 in the woodchuck model of chronic hepatitis B. J. Hepatol. 62(6), 1237-1245 (2015).
- 3. Lanford, R.E., Guerra, B., Chavez, D., et al. GS-9620, an oral agonist of toll-like receptor-7, induces prolonged suppression of hepatitis B virus in chronically infected chimpanzees. Gastroenterology 144(7), 1508-1517 (2013).
- 4. Bam, R.A., Hansen, D., Irrinki, A., et al. TLR7 agonist GS-9620 is a potent inhibitor of acute HIV-1 infection in human peripheral blood mononuclear cells. Antimicrob. Agents Chemother. [Epub ahead of print], 1-41 (2016).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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