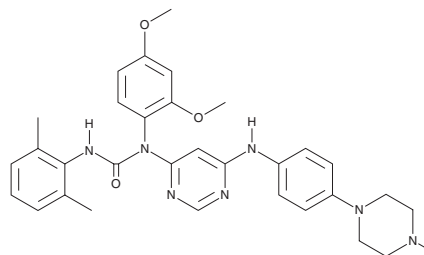


# PRODUCT INFORMATION



**HG-9-91-01**  
Item No. 19179

**CAS Registry No.:** 1456858-58-4  
**Formal Name:** N-(2,4-dimethoxyphenyl)-N'-(2,6-dimethylphenyl)-N-[6-[[4-(4-methyl-1-piperazinyl)phenyl]amino]-4-pyrimidinyl]-urea  
**MF:** C<sub>32</sub>H<sub>37</sub>N<sub>7</sub>O<sub>3</sub>  
**FW:** 567.7  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 303 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

## Laboratory Procedures

HG-9-91-01 is supplied as a crystalline solid. A stock solution may be made by dissolving the HG-9-91-01 in the solvent of choice, which should be purged with an inert gas. HG-9-91-01 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of HG-9-91-01 in ethanol and DMF is approximately 5 mg/ml and 3 mg/ml in DMSO.

HG-9-91-01 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, HG-9-91-01 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. HG-9-91-01 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

HG-9-91-01 is an inhibitor of salt-inducible kinases (SIKs; IC<sub>50</sub>s = 0.92, 6.6, and 9.6 nM for SIK1, SIK2, and SIK3, respectively).<sup>1</sup> It also inhibits Src, Lck, Yes, and BTK, as well as FGF and Ephrin receptors.<sup>1</sup> HG-9-91-01 increases LPS-stimulated IL-10 production and suppresses pro-inflammatory cytokine secretion in bone marrow-derived macrophages.<sup>1</sup> SIK inhibitors, including HG-9-91-01, enhance CREB-dependent gene transcription and IL-10 production in bone marrow-derived dendritic cells, THP-1 cells, and human primary macrophages.<sup>1</sup>

## Reference

1. Clark, K., MacKenzie, K.F., Petkevicius, K., *et al.* Phosphorylation of CRT3 by the salt-inducible kinases controls the interconversion of classically activated and regulatory macrophages. *Proc. Natl. Acad. Sci. USA* **109**(42), 16986-16991 (2012).

### WARNING

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

### SAFETY DATA

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.

### WARRANTY AND LIMITATION OF REMEDY

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