# PRODUCT INFORMATION



**CPSI-1306** 

Item No. 29905

CAS Registry No.: 1309793-47-2

Formal Name: 2-[3-(2,4-difluorophenyl)-4,5-

> dihydro-5-isoxazolyl]-1-(4morpholinyl)-ethanone

MF:  $C_{15}H_{16}F_2N_2O_3$ 

310.3 FW: ≥95% **Purity:** UV/Vis.:  $\lambda_{\text{max}}$ : 258 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**

CPSI-1306 is supplied as a crystalline solid. A stock solution may be made by dissolving the CPSI-1306 in the solvent of choice, which should be purged with an inert gas. CPSI-1306 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of CPSI-1306 in these solvents is approximately

CPSI-1306 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CPSI-1306 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CPSI-1306 has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

CPSI-1306 is an inhibitor of macrophage inhibitory factor (MIF). 1,2 In vivo, CPSI-1306 (20 mg/kg per day) decreases skin thickness and myeloperoxidase (MPO) activity and induces keratinocyte apoptosis, as well as reduces papilloma formation and progression to micro-invasive squamous cell carcinoma (SCC) in a mouse model of UVB-induced SCC. It lowers blood glucose levels and serum levels of IL-6 and TNF- $\alpha$  in a mouse model of non-insulin-dependent diabetes mellitus (NIDDM) induced by streptozotocin (Item No. 13104).<sup>2</sup>

# References

- 1. Nagarajan, P., Tober, K.L., Riggenbach, J.A., et al. MIF antagonist (CPSI-1306) protects against UVB-induced squamous cell carcinoma. Mol. Cancer Res. 12(9), 1292-1302 (2014).
- 2. Sanchez-Zamora, Y., Terrazas, L.I., Vilches-Flores, A., et al. Macrophage migration inhibitory factor is a therapeutic target in treatment of non-insulin-dependent diabetes mellitus. FASEB J. 24(7), 2583-2590 (2010).

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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