# PRODUCT INFORMATION



**IM-54** 

Item No. 13323

CAS Registry No.: 861891-50-1

Formal Name: 1-methyl-3-(1-methyl-1H-indol-3-yl)-

4-(pentylamino)-1H-pyrrole-2,5-dione

MF:  $C_{19}H_{23}N_3O_2$ FW: 325.4

**Purity:** ≥95%

 $\lambda_{\text{max}}$ : 206, 227, 289, 404 nm A crystalline solid UV/Vis.:

Supplied as:

-20°C Storage: Stability: ≥4 years

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

# **Laboratory Procedures**

IM-54 is supplied as a crystalline solid. A stock solution may be made by dissolving the IM-54 in the solvent of choice, which should be purged with an inert gas. IM-54 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of IM-54 in ethanol is approximately 1 mg/ml and approximately 20 mg/ml in DMSO and DMF.

IM-54 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, IM-54 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. IM-54 has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

IM-54 is an indolylmaleimide derivative which, at 1  $\mu$ M, inhibits necrotic cell death induced by  $H_2O_2$  in promyelocytic leukemia HL-60 cells. It does not prevent etoposide-induced apoptosis and does not inhibit protein kinase C or S6 kinase 1.1

### Reference

1. Dodo, K., Katoh, M., Shimizu, T., et al. Inhibition of hydrogen peroxide-induced necrotic cell death with 3-amino-2-indolylmaleimide derivatives. Bioorg. Med. Chem. Lett. 15(12), 3114-3118 (2005).

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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