

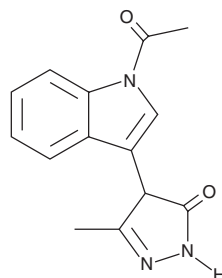
# PRODUCT INFORMATION



## StA-IFN-1

Item No. 22402

CAS Registry No.: 300839-31-0  
Formal Name: 4-(1-acetyl-1H-indol-3-yl)-2,4-dihydro-5-methyl-3H-pyrazol-3-one  
MF:  $C_{14}H_{13}N_3O_2$   
FW: 255.3  
Purity:  $\geq 98\%$   
UV/Vis.:  $\lambda_{\max}$ : 229, 305 nm  
Supplied as: A crystalline solid  
Storage:  $-20^{\circ}\text{C}$   
Stability:  $\geq 2$  years



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

### Laboratory Procedures

StA-IFN-1 is supplied as a crystalline solid. A stock solution may be made by dissolving the StA-IFN-1 in the solvent of choice. StA-IFN-1 is soluble in organic solvents such as DMSO and dimethyl formamide, which should be purged with an inert gas. The solubility of StA-IFN-1 in these solvents is approximately 5 and 3 mg/ml, respectively.

StA-IFN-1 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, StA-IFN-1 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. StA-IFN-1 has a solubility of approximately 0.1 mg/ml in a 1:10 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

StA-IFN-1 is an inhibitor of the interferon (IFN) induction pathway with an  $IC_{50}$  value of 4.1  $\mu\text{M}$  in a GFP reporter assay for IFN induction similar to TPCA-1 (Item No. 15115), which specifically inhibits the IKK $\beta$  component of the IFN induction pathway.<sup>1</sup> It does not show inhibitory activity in a GFP reporter assay for IFN signaling in which ruxolitinib (Item No. 11609), which is specific for the IFN signaling component JAK1, is active. StA-IFN-1 reduces the levels of IFN- $\beta$ , but not ISG MxA, mRNA, suggesting that it is selective for the IFN induction pathway and not the IFN signaling pathway.

### Reference

1. Gage, Z.O., Vasou, A., Gray, D.W., *et al.* Identification of novel inhibitors of the type I interferon induction pathway using cell-based high-throughput screening. *J. Biomol. Screen.* **21**(9), 978-988 (2016).

#### 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.

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