

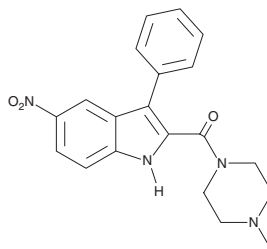
# PRODUCT INFORMATION



## MJN228

Item No. 18275

**CAS Registry No.:** 459168-97-9  
**Formal Name:** (4-methyl-1-piperazinyl)(5-nitro-3-phenyl-1H-indol-2-yl)-methanone  
**MF:** C<sub>20</sub>H<sub>20</sub>N<sub>4</sub>O<sub>3</sub>  
**FW:** 364.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 278 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

MJN228 is supplied as a crystalline solid. A stock solution may be made by dissolving the MJN228 in the solvent of choice. MJN228 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of MJN228 in these solvents is approximately 25 and 30 mg/ml, respectively.

MJN228 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MJN228 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. MJN228 has a solubility of approximately 0.25 mg/ml in a 1:3 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

MJN228 is a selective ligand for the lipid-binding protein nucleobindin 1 (NUCB1), blocking binding of the probe arachidonoyl ethanolamide-diazirine with an IC<sub>50</sub> value of 3.3 μM.<sup>1</sup> It prevents probe binding to NUCB1 in Neuro2a cells at concentrations as low as 10 μM. MJN228 has been used to elucidate the role of NUCB1 in lipid metabolic pathways in cells.<sup>1</sup>

### Reference

1. Niphakis, M.J., Lum, K.M., Cognetta, A.B., III, *et al.* A global map of the lipid-binding proteins and their ligandability in cells. *Cell* **161**, 1668-1680 (2015).

#### 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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