

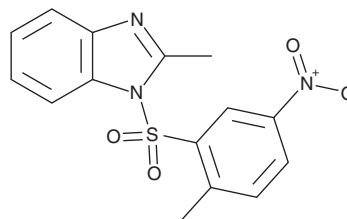
# PRODUCT INFORMATION



## BI-6015

Item No. 12032

**CAS Registry No.:** 93987-29-2  
**Formal Name:** 2-methyl-1-[(2-methyl-5-nitrophenyl)sulfonyl]-1H-benzimidazole  
**MF:** C<sub>15</sub>H<sub>13</sub>N<sub>3</sub>O<sub>4</sub>S  
**FW:** 331.3  
**Purity:** ≥95%  
**UV/Vis.:** λ<sub>max</sub>: 245 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

BI-6015 is supplied as a crystalline solid. A stock solution may be made by dissolving the BI-6015 in the solvent of choice, which should be purged with an inert gas. BI-6015 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of BI-6015 in these solvents is approximately 14 and 16 mg/ml, respectively.

BI-6015 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, BI-6015 should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. BI-6015 has a solubility of approximately 0.09 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

Hepatocyte nuclear factor 4α (HNF4α) is a nuclear receptor transcription factor that controls the expression of many genes including those involved in glucose and lipid homeostasis and maintenance of epithelial differentiation. BI-6015 is a small molecule antagonist of HNF4α that has been shown to repress the expression of known HNF4α target genes.<sup>1</sup> At concentrations up to 20 μM, BI-6015 has been shown to reduce endogenous insulin gene expression by as much as 50-fold in T6PNE cells.<sup>1</sup> The hepatocytes from livers of mice injected with 10 and 30 mg/kg BI-6015 exhibit marked, dose-dependent fat accumulation (steatosis).<sup>1</sup> Additionally, at a daily dose of 30 mg/kg, BI-6015 induces apoptosis in a human hepatocellular carcinoma mouse model.<sup>1</sup>

### Reference

1. Kiselyuk, A., Lee, S.-H., Farber-Katz, S., *et al.* HNF4α antagonists discovered by a high-throughput screen for modulators of the human insulin promoter. *Chem. Biol.* **19(7)**, 806-818 (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.

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