

Catalog # 10-1402 BI-6015

CAS# 93987-29-2 2-Methyl-1-[(2-methyl-5-nitrophenyl)sulfonyl]-1*H*-benzimidazole Lot # X106124

Hepatocyte nuclear factor 4α (HNF4 α) antagonist. HNF4 α is a central regulator of gene expression in cell types that play a central role in metabolic homeostasis. ¹ BI-6015 binds to HNF4 α with high affinity and modulates the expression of known target genes. It was shown to be selectively cytotoxic to cancer cell lines *in vitro* and *in vivo* however *in vivo* potency was limited by suboptimal pharmacokinetics. ² Represents the first small molecule tool for pharmacologic modulation of HNF4 α activity. ² Cell permeable.

- 1) Wang et al. (2000), Hepatocyte Nuclear Factor 4α Regulates the Expression of Pancreatic β -Cell Genes Implicated in Glucose Metabolism and Nutrient-induced Insulin Secretion; J.Biol.Chem. **275** 35953
- 2) Kiselyuk et al. (2012), $HNF4\alpha$ antagonists discovered by a high-throughput screen for modulators of the human insulin promotor, Chem.Biol. **19** 806

PHYSICAL DATA

Molecular Weight: 331.35

Molecular Formula: $C_{15}H_{13}N_3O_4S$ Purity: >98% by TLC

NMR: Conforms
DMSO (25 mg/mL with warming); ethanol (10 mg/mL with warming)

Physical Description: Tan solid

Solubility:

Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO or ethanol may be stored at -20°C for up to 2 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.