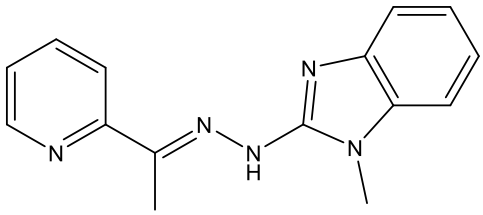
# Catalog # 10-3903
# SI-2

CAS# 380537-35-9

1-Methyl-N-[(E)-1-pyridin-2-ylethylideneamino]benzimidazole-2-amine

Lot # JKM1210



Si-2 is potent inhibitor of steroid receptor coactivator-3 (SRC-3).[1] It blocks MDA-MB-468 cell growth with an $IC_{50}$ = 3.4 nM without effecting normal cells.[1] It significantly inhibited breast cancer cell growth in an orthotopic MDA-MD-468 mouse model. Treatment of MCF-7 or triple negative MDA-MB-231 cells with SI-2 resulted in inhibition of proliferation and breast cancer stem cell (CSC) tumorsphere formation.[2] CSC markers $CD44^{+}/CD24^{-/1o}$ and aldehyde dehydrogenase (ALDH) were also reduced indicating that SI-2 can selectively interfere with the TIC/CSC state in breast cancer cells.[2,3]


1) Song *et al.* (2016), *Development of potent small-molecule inhibitors to drug the undruggable steroid receptor coactivator-3;* Proc. Natl. Acad. Sci. USA **113** 4970
2) Rohira *et al.* (2017), *Targeting SRC Coactivators Blocks the Tumor-Initiating Capacity of Cancer Stem-like Cells;* Cancer Res. **77** 4293
3) Truong *et al.* (2018), *Cancer Stem Cell Phenotypes in ER+ Breast Cancer Models are Promoted by PELP/AIB1 Complexes;* Mol. Cancer Res. **16** 707


## PHYSICAL DATA

| | |
|---|---|
| Molecular Weight: | 265.31 |
| Molecular Formula: | $C_{15}H_{15}N_5$ |
| Purity: | >98% HPLC |
| | NMR: (Conforms) |
| Solubility: | Soluble in DMSO (20 mg/ml) |
| Physical Description: | Pale orange solid |
| Storage and Stability: | Store as supplied at -20ºC for up to 1 year from the date of purchase. Store solutions at -20ºC for up to 1 month. |




Focus Biomolecules LLC 400 Davis Drive, Suite 600 Plymouth Meeting PA 19462

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