

PBIT

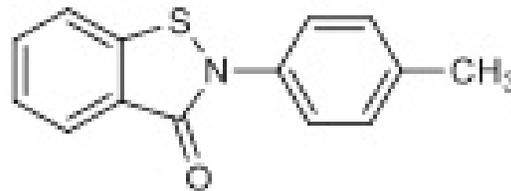
Catalog No: 14110, 14111**Format:** 25 mg, 5 mg**Chemical Properties:**

MW = 241.3

C₁₄H₁₁NOS

CAS 2514-30-9

Physical Properties: Off-white powder

Names: PBIT, 2-(4-Methylphenyl)-1,2-benzisothiazol-3(2H)-one

Pharmacology: The JARID1 (Jumonji AT-Rich Interactive Domain 1) family of lysine demethylases is responsible for demethylation of trimethylated lysine 4 in histone H3 (H3K4me3). PBIT is a potent and selective inhibitor of JARID1 (IC₅₀ = 3, 4.9 and 6 μM for JARID1B, 1A and 1C, respectively). Selective for JARID1 over UTX and JMJD3. Treatment of cells with PBIT inhibits the demethylation of H3K4me3. It inhibits proliferation of breast cancer cell lines expressing high levels of JARID1B (ref 1).

Solubilization: May be dissolved in DMSO (24 mg/ml); or ethanol (5 mg/ml)

Fluorescent Properties: N/A

Quality Control:

>98% (TLC); NMR (Conforms)

References:

1. J Sayegh *et al.* *J. Biol. Chem.* 2013, 288:9408

Storage and Guarantee: Store desiccated as supplied at -20°C for up to 2 years. Store solutions at -20°C for up to 1 month. This product is guaranteed for 6 months from date of arrival.