

Catalog # 10-2480

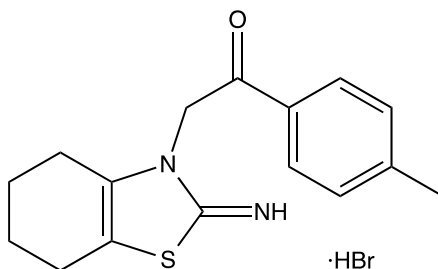
Pifithrin- α

CAS# 63208-82-2

PFT- α

1-(4-Methylphenyl)-2-(4,5,6,7-tetrahydro-2-imino-3(2H)-benzothiazolyl)ethanone · HBr

Lot # FBA1092



Reversible inhibitor of p53-mediated transcription and p53-dependent apoptosis. Enhances survival after genotoxic stress and protects against chemotherapeutic side-effects in mice.^{1,2} Suppresses self-renewal of embryonic stem cells.⁵ Protects against neuronal death in models of stroke and neurodegenerative disease.³ AhR agonist.⁴

- 1) Komarov *et al.* (1999), *A chemical inhibitor of p53 that protects mice from the side effects of cancer therapy*, *Science*, **285** 1733
- 2) Komarova and Gudkov *et al.* (2000), *Suppression of p53: a new approach to overcome the side effects of antitumor therapy*, *Biochemistry*, **65** 41
- 3) Culmsee *et al.* (2001), *A synthetic inhibitor of p53 protects neurons against death induced by ischemic and excitotoxic insults, and amyloid-peptide*; *J. Neurochem.*, **77** 220
- 4) Hoagland *et al.* (2005), *The p53 inhibitor pifithrin- α is a potent agonist of the aryl hydrocarbon receptor*, *J. Pharmacol. Exp. Ther.*, **314** 630
- 5) Abdelalim and Tooyama (2012), *The p53 inhibitor, pifithrin- α , suppresses self-renewal of embryonic stem cells*; *Biochem. Biophys. Res. Comm.*, **420** 605

PHYSICAL DATA

Molecular Weight: 367.31
Molecular Formula: C₁₆H₁₈N₂OS · HBr
Purity: 98% by TLC
NMR: (Conforms)
Solubility: DMSO (up to 25 mg/ml)
Physical Description: White solid
Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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