

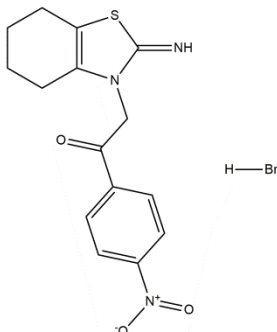
p-nitro-Pifithrin- α

08/19

ALTERNATE NAMES: 2-(2-imino-4,5,6,7-tetrahydro-1,3-benzothiazol-3-yl)-1-(4-nitrophenyl)ethanone, hydrobromide; 1-(4-Nitrophenyl)-2-(4,5,6,7-tetrahydro-2-imino-3(2H)-benzothiazolyl)ethanone, HBr; Pifithrin-alpha, p-Nitro hydrobromide; p-nitro-PFT- α

CATALOG #: B2845-1 1 mg
B2845-5 5 mg

STRUCTURE:



MOLECULAR FORMULA: C₁₅H₁₆BrN₃O₃S

MOLECULAR WEIGHT: 398.3

CAS NUMBER: 389850-21-9

APPEARANCE: A crystalline solid

PURITY: \geq 95%

SOLUBILITY: ~1mg/ml in DMSO and DMF

DESCRIPTION: p-nitro-Pifithrin- α is a cell-permeable analog of pifithrin- α . Pifithrin- α is an inhibitor of p53 that blocks p53-dependent apoptosis. p-nitro-Pifithrin- α blocks p53-mediated expression of p21/WAF1 and apoptosis in cortical neurons more potently than pifithrin- α . It suppresses the expression of TGF- β 1 in human proximal tubular cells (HK-2 cells) at a concentration of 10 μ M. It reduces hepatic triglyceride accumulation and lipotoxicity in mice fed a high fat diet.

STORAGE TEMPERATURE: -20°C. Store in the dark. Product is light sensitive. Protect from air. Store under desiccating conditions.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Komarov, P.G., Komarova, E.A., Kondratov, R.V., et al. A chemical inhibitor of p53 that protects mice from the side effects of cancer therapy. *Science* 285, 1733-1737 (1999).
2. Derdak, Z., Villegas, K.A., Harb, R., et al. Inhibition of p53 attenuates steatosis and liver injury in a mouse model of non-alcoholic fatty liver disease. *Journal of Hepatology* 58(4), 785-791 (2013).
3. Shimizu, H., Yisireyili, M., Nishijima, F., et al. Indoxyl sulfate enhances p53-TGF- β 1-Smad3 pathway in proximal tubular cells. *Am.J.Nephrol.* 37(2), 97-103 (2013).
4. Pietrancosta, N., Moumen, A., Dono, R., et al. Imino-tetrahydro-benzothiazole derivatives as p53 inhibitors: Discovery of a highly potent in vivo inhibitor and its action mechanism. *Journal of Medicinal Chemistry* 49(12), 3645-3652 (2006).

RELATED PRODUCTS:

Pifithrin- α , Cyclic, hydrobromide (Cat. No. 2270)
 Pifithrin- α (Cat. No. 1554)
 NSC 66811 (Cat. No. 2009)
 Myriocin (ISP-1) (Cat. No. 2567)
 Nimbolide (Cat. No. 1891)

DISCLAIMER: **FOR RESEARCH USE ONLY! Not to be used on humans.**