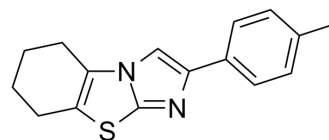


## Pifithrin-β

<b>Cat. No.:</b>	HY-16702
<b>CAS No.:</b>	60477-34-1
<b>Molecular Formula:</b>	C <sub>16</sub> H <sub>16</sub> N <sub>2</sub> S
<b>Molecular Weight:</b>	268.38
<b>Target:</b>	MDM-2/p53
<b>Pathway:</b>	Apoptosis
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Pifithrin-β (PFT β) is a potent p53 inhibitor with an IC <sub>50</sub> of 23 μM.
<b>IC<sub>50</sub> &amp; Target</b>	IC <sub>50</sub> : 23 μM (p53) <sup>[1]</sup>
<b>In Vitro</b>	Pifithrin-α, an inhibitor of the p53 protein, is regarded as a lead compound for cancer and neurodegenerative disease therapy. Pifithrin-α is very unstable in culture medium and rapidly converts to its condensation product pifithrin-β (PFT β), the N-acetyl derivative <sup>[2]</sup> . After 24 h, the viability assay shows that the pretreatments with 1 and 10 μM pifithrin-β exerts neuroprotective effects <sup>[3]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### CUSTOMER VALIDATION

- Cell Commun Signal. 2022 Sep 5;20(1):96.
- Front Immunol. 2020 Feb 20;8:75.
- Cell Biol Toxicol. 2022 Jan 13.
- Life Sci. 2021 Jun 7;280:119698.
- Front Cell Dev Biol. 2020 Jul 29;8:703.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

### REFERENCES

- [1]. Christodoulou MS, et al. Synthesis and biological evaluation of imidazolo[2,1-b]benzothiazole derivatives, as potential p53 inhibitors. *Bioorg Med Chem*. 2011 Mar 1;19(5):1649-57.
- [2]. Fernández-Cruz ML, et al. Biological and chemical studies on aryl hydrocarbon receptor induction by the p53 inhibitor pifithrin-α and its condensation product pifithrin-β. *Life Sci*. 2011 Apr 25;88(17-18):774-83.
- [3]. Da Pozzo E, et al. p53 functional inhibitors behaving like pifithrin-β counteract the Alzheimer peptide non-β-amyloid component effects in human SH-SY5Y cells. *ACS*

**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA