

## Product Information

### PIFITHRIN-ALPHA

(PFT- $\alpha$ )

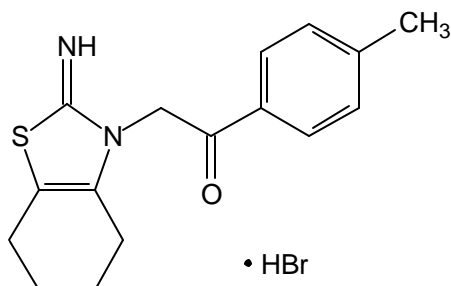
Product Number **P4359**

Storage Temperature  $-20\text{ }^{\circ}\text{C}$

CAS # 63208-82-2

2-(2-Imino-4,5,6,7-tetrahydrobenzothiazol-3-yl)-1-p-tolyethanone hydrobromide

#### Product Description



Appearance: powder

Molecular Formula:  $\text{C}_{16}\text{H}_{18}\text{N}_2\text{OS}\cdot\text{HBr}$

Formula Weight: 367.3

Purity: >95% by HPLC.

Melting Point  $192.1\text{-}192.5\text{ }^{\circ}\text{C}$ .

Packaged under inert gas.

Reversible inhibitor of p53-mediated apoptosis and p53-dependent gene transcription such as Cyclin G, p21/waf1 and mdm2 expression. Enhances cell survival after genotoxic stress such as UV irradiation

and treatment with cytotoxic compounds including Dox, Etopoxide, Taxol and AraC. Protects mice from lethal whole body gamma-irradiation without increase in cancer incidence. PFT-alpha treated animals showed undiminished DNA replication and abrogated Apoptosis in intestinal epithelia. The protective effect is not seen in p53-null mice or cells expressing dominant negative mutant of p53 gene. Protection is conferred by the transient expression of p53 in p53-deficient cell lines. Potential application in the reduction of side effects in radiation and chemotherapy and as blocker of p53 dependent apoptosis in hypoxia induced pathology and burns.

#### Storage/Stability

Store at  $-20\text{ }^{\circ}\text{C}$ . Protect from light.

#### Preparation instructions

Soluble in DMSO at 20 mg/ml. Following reconstitution, aliquot and store at  $-20\text{ }^{\circ}\text{C}$ . Unstable in aqueous solution.

#### References

1. Komarova, E.A., et al., *Biochemistry (Moscow)* **65**, 41-48 (2000).
2. Komarov, P.G., et al., *Science*, **285**, 1733-1737 (1999).

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