

Product Data Sheet

Product Name: TPh A
Cat. No.: GC61815

Chemical Properties

Cas. No. 21306-65-0

SMILES O=[S](/N=[S](C(C=C1)=CC=C1OCC2=CC=CC=C2)\C)(C(C=C3)=CC=C3C)=O

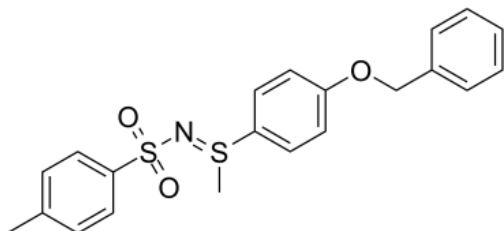
Formula C21H21NO3S2 M.Wt 399.53

Solubility DMSO : 250 mg/mL (625.74 mM) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Background

TPh A (Triphenyl Compound A) is a potent inhibitor of the nuclear protein pirin and binds specifically to pirin with a K_i of 0.6 μ M. TPh A disrupts the formation of the bcl3-pirin complex. TPh A can be used as a novel small molecule tool to regulate pirin in cells[1].

The Pirin is a nuclear protein with the nuclear factor I/CCAAT box transcription factor (NFI/CTF). Pirin proteins are highly conserved between mammals, plants, fungi, and prokaryotic organisms and are considered to belong to the cupin superfamily. TPh A (20 μ M; 5 hours) reduces the amount of pirin-

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

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bound Bcl3 and inhibits the interaction between pirin and Bcl3 in HEK293T cells in a glutathione S-transferase (GST) pulldown assay (HEK293T cells are transfected with vectors that encoded bcl3-Myc and pirin-His6 for 43 h of transfection)[1]. TPh A (0-100 μ M; 48 hours) does not exert any potent cytotoxic activity against many human cancer cell lines, it against MCF7, MDA-MB231, HeLa, DU145, HepG2, A549, HT1080, WM266-4, and SK-MEL-28 cells with IC50 values $>50 \mu$ M, and exhibits IC50 values of 27 μ M, 20 μ M and 26 μ M for PC3 HL60 and HT29 cells, respectively[1]. TPhA (0-50 μ M; 48 hours) inhibits cell migration in WM266-4 cells, SK-MEL-28 cell in a concentration-dependent manner[1].

References:

[1]. Isao Miyazaki, et al. A Small-Molecule Inhibitor Shows That Pirin Regulates Migration of Melanoma Cells. Nat Chem Biol. 2010 Sep;6(9):667-73.

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