Data Sheet (Cat.No.TN5254)

TargetMol
A DRUG SCREENING EXPERT

Wighteone

Chemical Properties

CAS No.:	51225-30-0
Formula:	C20H18O5
Molecular Weight:	338.4
Appearance:	N/A
Storage:	0-4℃ for short term (days to weeks), or -20℃ for long term (months).

Biological Description

Description	Wighteone is an antifungal isoflavone.Wighteone has in vitro cytocidal activity against KB cells, it has a potent anti-proliferative effect on human leukemia HL-60 cancer cell lines, it can effectively inhibit the proliferation of HER2-positive cancer cell lines, and this is considered to be the result of downregulating HSP90 receptor and downstream signaling.
Targets(IC_{50})	Antifection: None HSP90: None
In vitro	The limitations of currently available antifungal agents and the rapid emergence of drug-resistant strains necessitate more efficient approaches to screening and developing novel antifungal drugs. METHODS AND RESULTS: The antifungal activity of the natural products of a series of plants was evaluated and Wighteone, 5, 7, 4'-trihydroxy-6-(gamma,gamma-dimethylallyl)isoflavone showed excellent anti-yeast activity (MIC against Saccharomyces cerevisiae was 4 microg/ml). METHODS AND RESULTS: Transcriptome profiling of Wighteone-treated S. cerevisiae indicated that Wighteone is different from commonly used antifungal compounds in its mode of action.

Solubility Information

Solubility	< 1 mg/ml refers to the product slightly soluble or insoluble

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.955 mL	14.775 mL	29.551 mL
5 mM	0.591 mL	2.955 mL	5.910 mL
10 mM	0.296 mL	1.478 mL	2.955 mL
50 mM	0.059 mL	0.296 mL	0.591 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 ℃ for 6 months; - 20 ℃ for 1 month. Please use it as soon as possible.

Reference

1. Genome-wide analysis of the expression profile of Saccharomyces cerevisiae in response to treatment with the plant isoflavone, wighteone, as a potential antifungal agent. Biotechnol Lett. 2006 Jan;28(2):99-105.
2. Cytotoxic isoflavones from Erythrina indica. Phytochemistry. 2001 Dec;58(7):1113-20.

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