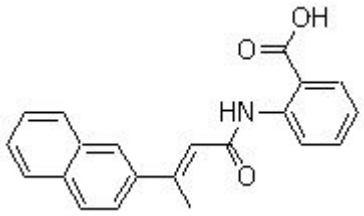
Product Introduction

BIBR 1532

BIBR 1532 is a potent, selective, non-competitive **telomerase** inhibitor with **IC50** of 100 nM

Technical Data:

Molecular Weight (MW):	331.36	
Formula:	$C_{21}H_{17}NO_3$	
Solubility (25°C) * <1 mg/ml means slightly soluble or insoluble:	DMSO 66 mg/mL	
	Water <1 mg/mL	
	Ethanol 3 mg/mL	
Purity:	>98%	
Storage:	3 years -20℃Powder	
	6 months-80℃in DMSO	
CAS No.:	321674-73-1	

Biological Activity

BIBR 1532 exhibits an non-competitive inhibitory effect on telomerase activity. [1] In JVM13 leukemia cell line, BIBR 1532 shows an antiproliferative effect in a dose-dependent range with IC50 of 52 μM, and similar results are also observed in other leukemia cell lines including Nalm-1, HL-60, and Jurkat. In addition, BIBR 1532 results in a direct antiproliferative effect on acute myeloid leukemia (AML) with IC50 of 56 μM without affecting the proliferative capacity of normal hematopoietic progenitor cells. [2] BIBR 1532 (2.5 μM) reduces colony-forming ability, and induces telomere length shortening as well as chemotherapeutic sensitization by inhibiting telomerase activity in MCF-7/WT and melphalan-resistant MCF-7/Mln^R cell lines. [3] In T-cell prolymphocytic leukemia (T-PLL), BIBR 1532 shows selective cytotoxic

effects in a dose-dependent manner and BIBR 1532-treated cells also demonstrates nuclear condensation and formation of apoptotic bodies morphologically compatible with apoptosis. [4] A recent study shows that combination treatment of BIBR 1532 and chemotherapeutic agents carboplatin results in a potential synergy for eliminateing ovarian cancer spheroid-forming cells in ES2, SKOV3, and TOV112D cell lines. [5]

References

[1] Pascolo E, et al. J Biol Chem. 2002, 277(18), 15566-15572.

[2] El-Daly H, et al. Blood. 2005, 105(4), 1742-1749.

[3] Ward RJ, et al. Mol Pharmacol. 2005, 68(3), 779-786.

[4] R?th A, et al. Leukemia. 2007, 21(12), 2456-2462.

[5] Meng E, et al. Gynecol Oncol. 2012, 124(3), 598-605.