Product Data Sheet

Chemical Properties

- **Product Name:** BIBR 1532
- **Cas No.:** 321674-73-1
- **M.Wt:** 331.36
- **Formula:** C21H17NO3
- **Synonyms:** N/A
- **Chemical Name:** 2-[[E]-3-naphthalen-2-ylbut-2-enoyl]amino]benzoic acid
- **Canonical SMILES:** CC(=CC(=O)NC1=CC=CC=C1C(=O)O)C2=CC3=CC=CC=C3C=C2
- **Solubility:** \( \geq 15.65\text{mg/mL} \) in DMSO
- **Storage:** Store at \(-20^\circ\text{C}\)
- **General tips:** For obtaining a higher solubility, please warm the tube at \(37^\circ\text{C}\) and shake it in the ultrasonic bath for a while. Stock solution can be stored below \(-20^\circ\text{C}\) for several months.
- **Shopping Condition:** Evaluation sample solution: ship with blue ice
  All other available size: ship with RT, or blue ice upon request

Biological Activity

- **Targets:** DNA Damage/DNA Repair
- **Pathways:** Telomerase
- **Description:**
  BIBR 1532 is a novel, specific telomerase inhibitor with IC50 of 93 nM [1]. It has been reported that BIBR 1532 inhibited the reverse transcriptase of telomerase, hTERT, and shortened the length of the telomerase to suppress human cancer cell proliferation [1]. In pre-B acute lymphoblastic leukemia cells, BIBR1532 suppressed c-Myc and hTERT expression in a concentration-dependent manner to inhibit telomerase activity, and high doses of BIBR1532 could induce apoptosis by elevating p73, Bax/Bcl-2 and caspase-3 activation [2]. In NB4 leukemic cells, combined treatments with BIBR 1532 and arsenic trioxide suppressed cell proliferative
capacity and inhibited telomerase activity probably via transcriptional suppression of c-Myc and hTERT. [4]

Reference:


Protocol

Cell experiment:

Cell lines Nalm-6 cells

Preparation method The solubility of this compound in DMSO is > 15.65 mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below - 20 °C for several months.

Reacting conditions

Applications In Nalm-6 cells, BIBR 1532 at the concentrations of 30, 60 and 90 μM inhibited DNA synthesis rates by 10, 17 and 28%, respectively. MTT assay analysis showed that BIBR 1532 concentration-dependently reduced the metabolic activity of Nalm-6 cells (15, 30 and 44% at the concentrations of 30, 60 and 90 μ M, respectively). At the doses of 10 and 30 μM, BIBR 1532 partially inhibited telomerase activity while at the higher doses, i.e. 60 and 90 μM, BIBR 1532 resulted in marked telomerase inhibition.

Reference:

Product Citations


Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most ApexBio products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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