

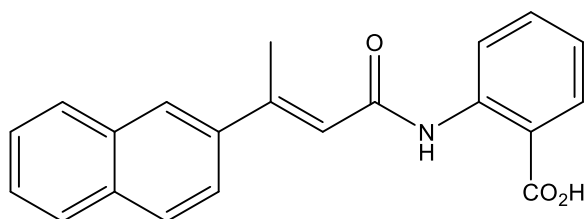
Catalog # 10-3920

BIBR1532

CAS# 321674-73-1

(E)-2-(3-(Naphthalen-2-yl)but-2-enamido)benzoic acid

Lot # FBS3025



BIBR1532 is a non-competitive specific inhibitor of telomerase ($IC_{50} = 93$ nM), targeting telomerase reverse transcriptase (hTERT).^{1,2} Induces apoptosis in MCF-7 breast cancer cells and breast cancer stem cells³ and affected the epithelial mesenchymal transition in breast cancer stem cells⁴. BIBR1532 eliminated pancreatic stem cells *via* DNA damage and apoptosis in primary patient-derived samples.⁵ It significantly inhibited cell proliferation and induced apoptosis in acute myeloid leukemia stem cells.⁶

- 1) Damm *et al.* (2001), *A highly selective telomerase inhibitor limiting human cancer cell proliferation*; EMBO J., **20** 6958
- 2) Pascolo *et al.* (2002), *Mechanism of human telomerase inhibition by BIBR1532, a synthetic, non-nucleosidic drug candidate*; J. Biol. Chem., **277** 15566
- 3) Dogan *et al.* (2018), *Investigation of the effect of telomerase inhibitor BIBR1532 on breast cancer and breast cancer stem cells*; J. Cell Biochem., **120** 1282
- 4) Kusoglu *et al.* (2020), *Telomerase inhibition regulates EMT mechanism in breast cancer stem cells*; Gene, **759** 145001
- 5) Walter *et al.* (2021), *Telomerase and Pluripotency Factors Jointly Regulate Stemness in Pancreatic Cancer Stem Cells*; Cancers (Basel), **13** 3145
- 6) Rafat *et al.* (2022), *Telomerase inhibition on acute myeloid leukemia stem cell induced apoptosis with both intrinsic and extrinsic pathways*; Life Sci., **295** 120402

PHYSICAL DATA

Molecular Weight:	331.37
Molecular Formula:	C ₂₁ H ₁₇ NO ₃
Purity:	>98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (50 mg/ml)
Physical Description:	White solid.
Storage and Stability:	Store as supplied at -20°C for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months.

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