

B02, RAD51 inhibitor

Catalog	Unit
TBI3425-5MG	5 mg
TBI3425-25MG	25 mg

Product Details

Formal Name: 3-(Phenylmethyl)-2-[(1E)-2-(3-pyridinyl)ethenyl]-4(3H)-quinazolinone

Molecular Formula: C₂₂H₁₇N₃O

Formula Weight: 339.4

CAS Number: 1290541-46-6

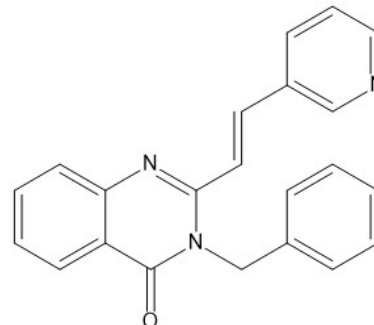
Purity: >98%

Formulation: Powder

Solubility: Soluble in DMSO (35 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

RAD51 inhibitor

Functions

RAD51 is a key protein involved in homologous recombination that plays a critical role in the repair of DNA double-strand breaks (DSB) and interstrand cross-links (ICL). B02 was identified in a high-throughput screen using a DNA strand exchange assay and was found to specifically inhibit human RAD51 (IC₅₀=27.4 μM) but not its *E. coli* homolog (RecA). It sensitizes multiple myeloma cells to doxorubicin and potentiates breast cancer cell killing by therapeutic agents in mouse models. B02 induces a heat-shock protein mediated cellular response that positively regulates the conversion of rcDNA to cccDNA via the authentic intracellular amplification pathway in human hepatoma cells.

Application Procedures

First dissolved in Soluble in DMSO (35 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 2 months.

For research use only.