

Product Data Sheet

Product Name: IBR2
Cat. No.: GC32912

Chemical Properties

Cas. No. 313526-24-8

SMILES O=S(N1C(C2=CNC3=C2C=CC=C3)C4=C(C=CC=C4)C=C1)(CC5=CC=CC=C5)=O

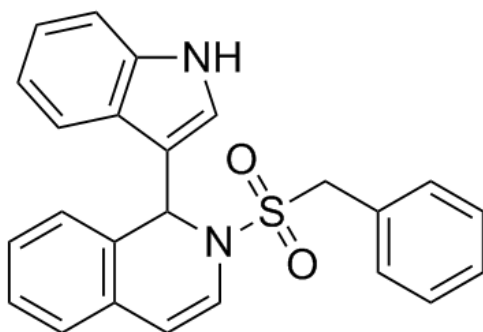
Formula C24H20N2O2S M.Wt 400.49

Solubility DMSO : ≥ 150 mg/mL (374.54 mM) Storage Store at -20°C

General tips For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request.

Structure



Protocol

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA

Product Data Sheet

Cell experiment: Human breast cancer cell lines MCF7, MDA-MB-231, MDA-MB-361, MDA-MB-435, MDA-MB468, Hs578-T, human osteosarcoma cell line U20S, human glioblastoma cell line T98G and human cervical adenocarcinoma cell line HeLa are used. Standard XTT assays with a four-day drug treatment procedure are performed to measure the dose dependent cytotoxicity of IBR analogs in cultured cells. In brief, cells are plated on 96-well dishes one day before the drug treatment, followed by drug (e.g., IBR2) treatment on day 2 and XTT assay on day 6 after drug addition by using a commercial cell proliferation kit . Triplicate sets are measured and compiled for final data presentation[1].

References:

[1]. Zhu J, et al. Synthesis, molecular modeling, and biological evaluation of novel RAD51 inhibitors. Eur J Med Chem. 2015;96:196-208.

Background

IBR2 is a specific RAD51 inhibitor.

IBR2 shows interesting RAD51 inhibition activities. RAD51 is rapidly degraded in IBR2-treated cancer cells, and the homologous recombination repair is impaired, subsequently leading to cell death. The IC₅₀ values of the original IBR2 are in the range of 12-20 μ M for most tested cancer cell lines. IBR2 can inhibit the growth of triple-negative human breast cancer cell line MBA-MD-468 with an IC₅₀ of 14.8 μ M[1].

[1]. Zhu J, et al. Synthesis, molecular modeling, and biological evaluation of novel RAD51 inhibitors. Eur J Med Chem. 2015;96:196-208.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: (909) 407-4943 Fax: (626) 353-8530 E-mail: tech@glpbio.com

Address: 10292 Central Ave. #205, Montclair, CA, USA