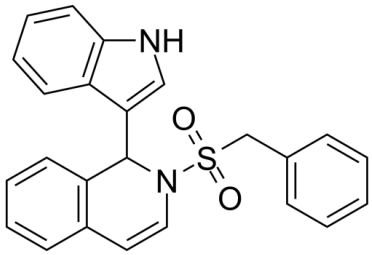
Data Sheet

Product Name:	IBR2
Cat. No.:	CS-0034478
CAS No.:	313526-24-8
Molecular Formula:	C24H20N2O2S
Molecular Weight:	400.49
Target:	RAD51
Pathway:	Cell Cycle/DNA Damage
Solubility:	DMSO : ≥ 150 mg/mL (374.54 mM)



BIOLOGICAL ACTIVITY:

IBR2 is a specific **RAD51** inhibitor. IC50 & Target: RAD51[1] **In Vitro:** 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 IC_{50} values of the original IBR2 are in the range of 12-20 μM for most tested cancer cell lines. IBR2 can inhibit the growth of triple-negative human breast cancer cell line MBA-MD-468 with an IC_{50} of 14.8 μM[1].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: [1]**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.

CAIndexNames:

Isoquinoline, 1,2-dihydro-1-(1H-indol-3-yl)-2-[(phenylmethyl)sulfonyl]-

SMILES:

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

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