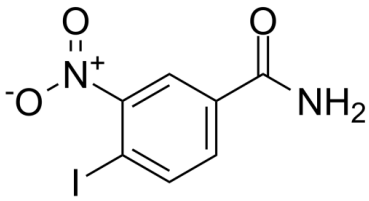
Data Sheet

Product Name:	Iniparib
Cat. No.:	CS-0145
CAS No.:	160003-66-7
Molecular Formula:	C7H5IN2O3
Molecular Weight:	292.03
Target:	PARP
Pathway:	Cell Cycle/DNA Damage; Epigenetics
Solubility:	DMSO : 100 mg/mL (342.43 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Iniparib (BSI-201) is an irreversible inhibitor of **PARP1**, used in the research of triple negative breast cancer. IC50 & Target: PARP1[3] **In Vitro:** Iniparib nonselectively modifies cysteine-containing proteins in tumor cells[1]. Iniparib (100 μM) weakly inhibits SSB repair, and the inhibition can be reversed by knockdown of PARP1[2]. Iniparib in combination with cisplatin is cytotoxic to Myc/MDA-231 with EMT changes[3].

PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: [1]For nine day cell proliferation assay, **MDA-MB-436 and MDA-MB-231 cells** are plated at 2000 and 500 cells/well respectively in a 96-well plate and treated with veliparib, cmpd-A, cmpd-C, Iniparib or Iniparib-met at 0, 0.0001, 0.01,0.1, 1 or 10 μM for nine days. For five day cell proliferation assay, MDAMB-231 and MDA-MB-436 cells are plated at 1000 and 4000 cells/well respectively in a 96-well plate and treated with **Iniparib** or Iniparib-met **at 0. 0.1, 0.3, 1, 3 or 10 μM** in the presence of 0, 1.8, 3.75, or 7.5 μM BSO for 5 days. DLD1^{+}/$^{+}$ and DLD1^{-}/$^{-}$ cells are plated at 1000 cells/well in a 96-well plate and treated with TMZ at 0, 0.003, 0.01, 0.03, 0.1, 0.3 or 1 mM in the presence of 0, 0.005, 0.05, 0.5, or 5 μM veliparib, or Iniparib for five days. After treatment, cell titer glow is carried out[1].

References:

[1]. Liu X, et al. Iniparib nonselectively modifies cysteine-containing proteins in tumor cells and is not a bona fide PARP inhibitor. Clin Cancer Res. 2012 Jan 15;18(2):510-23.

[2]. Ma W, et al. Differential effects of poly(ADP-ribose) polymerase inhibition on DNA break repair in human cells are revealed with Epstein-Barr virus. Proc Natl Acad Sci U S A. 2012 Apr 24;109(17):6590-5.

[3]. Yin S, et al. Myc mediates cancer stem-like cells and EMT changes in triple negative breast cancers cells. PLoS One. 2017 Aug 17;12(8):e0183578.

CAIndexNames:

Benzamide, 4-iodo-3-nitro-

SMILES:

O=C(C1=CC=C(C([N+]([O-])=O)=C1)I)N

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

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