

Catalog	Unit
TBI4099-10MG	10 mg
TBI4099-50MG	50 mg

Product Details

Formal Name: 4-Bromo-N-(4-bromophenyl)-3-[[[(phenylmethyl)amino]sulfonyl]benzamide

Molecular Formula: C₂₀H₁₆BrN₂O₃S

Formula Weight: 524.23

CAS Number: 312756-74-4

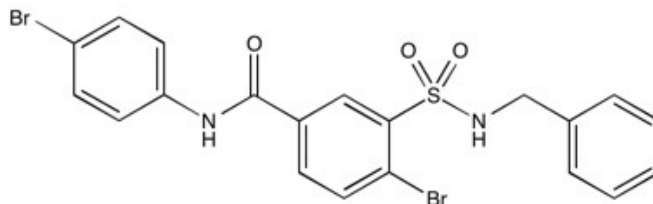
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 30 mg/ml)

Storage: RT

Stability: ≥ 1 year.



Applications

RAD51 activator; CRISPR enhancer

Functions

RAD51 is a strand exchange protein that is critical for the central steps in homologous recombination (HR) of DNA during double strand break repair. Because HR usually occurs without mutations, it is critically important for maintaining genomic stability. RS-1 is a small molecule that enhances the HR activity of RAD51 by promoting the formation of active presynaptic filaments during repair. At low micromolar levels, it was able to increase cellular resistance of neonatal human dermal fibroblasts to the chemotherapeutic agent cisplatin. HR stimulation in various cell types could lead to temporary protection from DNA damaging agents. RS-1 has been used to exploit the RAD51 overexpression in cancerous cells by inducing lethality via genotoxic RAD51 protein complexes. RS-1 has also been found to a potent enhancer of CRISPR- and TALEN- based gene editing.

Application Procedures

First dissolved in DMSO (up to 30 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.