

## Indisulam, RBM39 Molecular glue

Catalog	Unit
TBI3927-5MG	5 mg
TBI3927-25MG	25 mg

### Product Details

**Formal Name:** 4-N-(3-Chloro-1H-indol-7-yl)benzene-1,4-disulfonamide

**Alternate Names:** E7070

**Molecular Formula:** C<sub>14</sub>H<sub>12</sub>ClN<sub>3</sub>O<sub>4</sub>S<sub>2</sub>

**Formula Weight:** 385.8

**CAS Number:** 165668-41-7

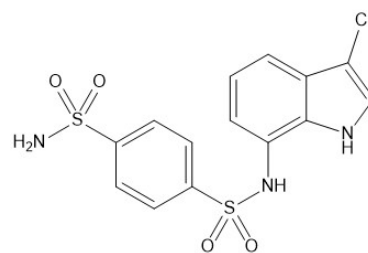
**Purity:** >98%

**Formulation:** Powder

**Solubility:** Soluble in DMSO (up to 25 mg/ml)

**Storage:** -20°C

**Stability:** ≥ 2 years.



### Applications

RBM39 Molecular glue

### Functions

Originally described as a potent antitumor agent that targeted the G1 phase of cell cycle via suppression of activation of CDK2 and cyclin E expression. More recently it has been found to act as a molecular glue promoting the recruitment of RNA binding motif protein 39 (RBM39) to the CUL4-DCAF15 E3 ubiquitin ligase leading to proteasomal degradation. Removal of splicing factor RBM39 leads to altered RNA splicing and death in multiple cancer cell lines – Indisulam alters the expression of more than 3000 genes and causes widespread intron retention and exon skipping. It induced metabolome perturbations and mitochondrial dysfunction in neuroblastoma models leading to complete tumor regression without relapse. Arginine has been found to bind to RBM39 causing reprogramming of metabolic genes to promote tumor growth – indisulam treatment leading to RBM39 degradation mimics arginine depletion resulting in reduced growth in patient-derived hepatocellular carcinoma organoids.

### Application Procedures

First dissolved in DMSO (25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 1 month.

**For research use only.**