



**Xcess Biosciences Inc.**

7144 N Harlem Ave #169

Chicago, IL 60631 USA

<http://www.xcessbio.com>

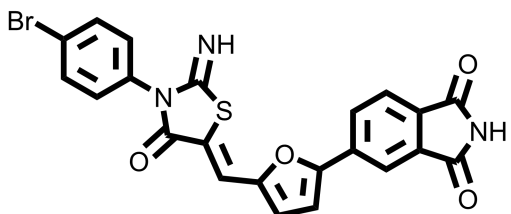
Toll free: 1-866-706-2330

Fax: 1-619- 810-0718

Email: [info@xcessbio.com](mailto:info@xcessbio.com)

## TRAIL Receptor DR5 Activator – Bioymifi

**Chemical Name:** (Z)-5-(5-((3-(4-bromophenyl)-2-imino-4-oxothiazolidin-5-ylidene)methyl)furan-2-yl)isoindoline-1,3-dione



Molecular Weight:	494.32
Formula:	C <sub>22</sub> H <sub>12</sub> BrN <sub>3</sub> O <sub>4</sub> S
Purity:	≥ 97%
CAS#:	1420071-30-2
Solubility:	DMSO up to 100 mM
Storage	Powder: 4°C 1 year DMSO: 4°C 3 month -20°C 1 year

### Biological Activity:

Bioymifi is a potent and selective small molecule agonist of DR5, identified by a high-throughput chemical screening for compounds that promote cell death in synergy with a small-molecule mimetic of Smac. Bioymifi directly targets DR5, specifically binds the ECD of DR5 (K<sub>d</sub> ~1.2 μM), and induces the formation of DR5 aggregates and DR5 activation. Bioymifi induces caspase-8-dependent apoptosis, which occurs through a DR5-dependent extrinsic pathway but independent of TRAIL. Bioymifi is capable of acting as a single agent to induce DR5 clustering and aggregation, leading to apoptosis without the need for a Smac mimetic in a variety of cancer cell lines, even in U2OS and HT29 cell lines. Bioymifi could be a potential lead compound for the development of small-molecule TRAIL mimics targeting DR5 for cancer therapy.

### How to Use:

**In vitro:** Bioymifi was used at 5-10 μM final concentration in vitro and in cellular assays.

**In vivo:** n/a

### Reference:

1. Wang G, et al. Small-molecule activation of the TRAIL receptor DR5 in human cancer cells. (2012) Nat Chem Biol. 9(2):84-89.

Products are for research use only. Not for human use.