

# PRODUCT INFORMATION



## Bioymifi

Item No. 14242

**CAS Registry No.:** 1420071-30-2  
**Formal Name:** 5-[5-[[3-(4-bromophenyl)-2-imino-4-oxo-5-thiazolidinylidene]methyl]-2-furanyl]-1H-isoindole-1,3(2H)-dione

**MF:** C<sub>22</sub>H<sub>12</sub>BrN<sub>3</sub>O<sub>4</sub>S

**FW:** 494.3

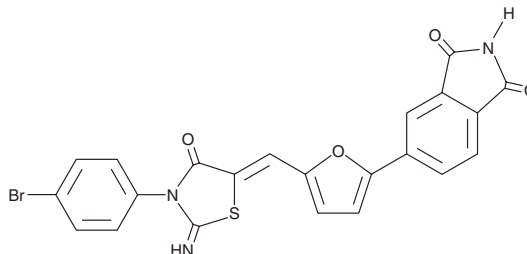
**Purity:** ≥95%

**UV/Vis.:** λ<sub>max</sub>: 219, 267, 405 nm

**Supplied as:** A crystalline solid

**Storage:** -20°C

**Stability:** ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

Bioymifi is supplied as a crystalline solid. A stock solution may be made by dissolving the bioymifi in the solvent of choice, which should be purged with an inert gas. Bioymifi is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of bioymifi in these solvents is approximately 10 and 20 mg/ml, respectively.

Bioymifi is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, bioymifi should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Bioymifi has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Apoptosis is induced by certain cytokines including TNF and Fas ligand in the TNF family through their death domain containing receptors. TNF-related apoptosis-inducing ligand (TRAIL or Apo2L), a member of this family, activates apoptosis in a variety of tumor cell lines by signaling through the death receptors, DR4 and DR5. Bioymifi directly activates DR5 ( $K_d = 1.2 \mu\text{M}$ ;  $\text{IC}_{50} = 2 \mu\text{M}$ ), inducing DR5 clustering, which leads to the initiation of FADD/caspase-8-dependent apoptosis in various cancer cells.<sup>1</sup>

### Reference

1. Wang, G., Wang, X., Yu, H., *et al.* Small-molecule activation of the TRAIL receptor DR5 in human cancer cells. *Nat. Chem. Biol.* **9**, 84-90 (2012).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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