

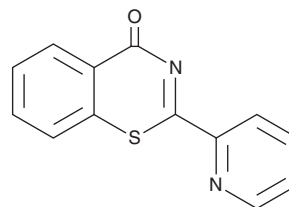
# PRODUCT INFORMATION



## BTZO-1

Item No. 28161

**CAS Registry No.:** 99420-15-2  
**Formal Name:** 2-(2-pyridinyl)-4H-1,3-benzothiazin-4-one  
**MF:** C<sub>13</sub>H<sub>8</sub>N<sub>2</sub>OS  
**FW:** 240.3  
**Purity:** ≥98%  
**Supplied as:** A 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

BTZO-1 is supplied as a solid. A stock solution may be made by dissolving the BTZO-1 in the solvent of choice, which should be purged with an inert gas. BTZO-1 is soluble in DMSO.

### Description

BTZO-1 is an antioxidant response element (ARE) activator with cardioprotective activity.<sup>1</sup> It increases expression of an ARE-luciferase reporter construct in H9c2 cells in a concentration-dependent manner as well as mRNA expression of the ARE-regulated genes for the glutathione S-transferase Ya subunit (GST Ya) and heme oxygenase-1 (HO-1) in neonatal rat cardiomyocytes. BTZO-1 binds to macrophage migration inhibitory factor (MIF; K<sub>d</sub> = 68.6 nM) and increases expression of GST Ya in H9c2 cells in a MIF-dependent manner when used at a concentration of 3 μM. It inhibits cell death induced by serum deprivation or doxorubicin (Item No. 15007) in neonatal rat cardiomyocytes in a concentration-dependent manner.

### Reference

1. Kimura, H., Sato, Y., Tajima, Y., *et al.* BTZO-1, a cardioprotective agent, reveals that macrophage migration inhibitory factor regulates ARE-mediated gene expression. *Chem. Biol.* **17**(12), 1282-1294 (2010).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM