Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@m2stage.hellobio.com

DATASHEET

1-EBIO

Product overview

Name	1-EBIO
Cat No	HB1045
Biological action	Activator
Purity	>98%
Description	Epithelial K_{Ca} channel activator. Promotes ESC differentiation into cardiomyocytes.

Images

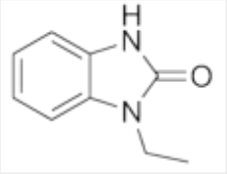
Biological Data

Biological description	Epithelial K_{Ca} channel activator ($K_{0.5}$ = 84 µM for K_{Ca}3.1 channels). Hyperpolarises aortic valve endothelial cells to the same extent as acetylcholine. Also promotes embroyonic stem cell (ESC) differentiation into cardiomyocytes. Displays vasodilation and anticonvulsant properties.

Solubility & Handling

Storage instructions	Room temperature
Solubility overview	Soluble in DMSO (100mM) and in ethanol (100mM)
Important	This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use.

Chemical Data

Chemical name	1-Ethyl-2-benzimidazolinone
Molecular Weight	162.19
Chemical structure	
Molecular Formula	$C_9H_{10}N_2O$
CAS Number	10045-45-1

Chemical name	1-Ethyl-2-benzimidazolinone
PubChem identifier	82320
SMILES	CCN1C2=CC=CC=C2NC1=O
InChi	InChI=1S/C9H10N2O/c1-2-11-8-6-4-3-5-7(8)10-9(11)12/h3-6H,2H2,1H3,(H,10,12)
InChiKey	CXUCKELNYMZTRT-UHFFFAOYSA-N
MDL number	MFCD00005715

References

1-Ethyl-2-benzimidazolinone stimulates endothelial K(Ca) channels and nitric oxide formation in rat mesenteric vessels.

Adeagbo AS (1999) Eur J Pharmacol 379(2-3)
PubMedID 10497901

Pharmacological activation of cloned intermediate- and small-conductance Ca(2+)-activated K(+) channels.

Syme CA *et al* (2000) Am J Physiol Cell Physiol 278(3)
PubMedID 10712246

In vivo characterisation of the small-conductance KCa (SK) channel activator 1-ethyl-2-benzimidazolinone (1-EBIO) as a potential anticonvulsant.

Anderson NJ *et al* (2006) Eur J Pharmacol 546(1-3)
PubMedID 16925994

Reduced hyperpolarization in endothelial cells of rabbit aortic valve following chronic nitroglycerine administration.

Kusama N *et al* (2005) Br J Pharmacol 146(4)
PubMedID 16056232