

IBMX 3-Isobutyl-1-methylxanthine

Publication Number MAN0003884

Revision Date 09 May 2011

Catalog Number:	PHZ1124
Quantity:	1.0 g
Lot Number:	See product label.
Appearance:	White solid
Molecular Weight:	222.2
Purity:	99%, as assessed by TLC.
Biological Activity:	$IC_{50} = 2-50 \ \mu M.$
Formulation:	$C_{10}H_{14}N_4O_2$
Sterility:	This product is not sterile.
Solubility:	Soluble in DMSO and ethanol.
Summary:	IBMX is a nonspecific inhibitor of phosphodiesterases that also possesses adenosine agonist activity.
Storage:	Store, as supplied, at room temperature. Upon solubilization, apportion into working aliquots and store at -20° C. Avoid repeated freeze/thaw cycles. Solutions are stable at -20° C for up to three months.
Expiration Date:	Expires one year from date of receipt when stored as instructed.
References:	Beavo, J.A., et al. (1970) Effects of xanthine derivatives on lipolysis and on adenosine 3',5'-monophosphate phosphodiesterase activity. Mol. Pharmacol. 6(6):597–603.
	Coffin, V.L. and R.D. Spealman (1989) Psychomotor-stimulant effects of 3-isobutyl-1-methylxanthine: comparison with caffeine and 7-(2-chloroethyl) theophylline. Eur. J. Pharmacol. 170(1-2):35–40.
	Saavedra, A.P., et al. (2002) Role of cAMP, PKA and Rap1A in thyroid follicular cell survival. Oncogene 21(5):778–788.
	Van Staveren, W.C., et al. (2001) The effects of phosphodiesterase inhibition on cyclic GMP and cyclic AMP accumulation in the hippocampus of the rat. Brain Res. 888(2):275–286.
	Simonsson, E., et al. (2000) The cyclic AMP-protein kinase A pathway restrains islet phospholipase A(2) activation. Biochem. Biophys. Res. Commun. 269(1):242–246.
CAUTION	Avoid contact with eyes, skin, and mucous membranes. Wear protective clothing when handling this product. Not for human use.

Related Products:

Product	Catalog no.
ERK1&2 [pTpY ^{185/187}] antibody	44-680G
Tau [pT ²¹²] antibody	44-740G
Tau [pS ²¹⁴] antibody	44-742G
Tau [pS ²⁶²] antibody	44-750G
Tau [pS ³⁵⁶] antibody	44-751G
Tau [pS ⁴⁰⁹] antibody	44-760G

Explanation of Symbols

The symbols present on the product label are explained below:

Symbol	Description	Symbol	Description
REF	Catalog Number	LOT	Batch code
RUO	Research Use Only	IVD	In vitro diagnostic medical device
Σ	Use by	X	Temperature limitation
	Manufacturer	EC REP	European Community authorized representative
[-]	Without, does not contain	[+]	With, contains
from Light	Protect from light	\triangle	Consult accompanying documents
ĺĺ	Directs the user to consult instructions for use (IFU), accompanying the product.		

Limited Use Label License: Research Use Only

The purchase of this product conveys to the purchaser the limited, non-transferable right to use the purchased amount of the product only to perform internal research for the sole benefit of the purchaser. No right to resell this product or any of its components is conveyed expressly, by implication, or by estoppel. This product is for internal research purposes only and is not for use in commercial applications of any kind, including, without limitation, quality control and commercial services such as reporting the results of purchaser's activities for a fee or other form of consideration. For information on obtaining additional rights, please contact <u>outlicensing@lifetech.com</u> or Out Licensing, Life Technologies, 5791 Van Allen Way, Carlsbad, California 92008.

For Research Use Only. Caution: Not for human or animal therapeutic or diagnostic use.

Manufacturing site: 7335 Executive Way | Frederick, MD 21704 | Toll Free in USA 800.955.6288

© 2011 Life Technologies Corporation. All rights reserved. The trademarks mentioned herein are the property of Life Technologies Corporation or their respective owners.

For support visit www.lifetechnologies.com/support or email techsupport@lifetech.com



www.lifetechnologies.com