

PD98059 2'-Amino-3'-methoxyflavone

Publication Number MAN0003885 Rev. 2.00

Catalog Number:	PHZ1164
Quantity:	5.0 mg
Lot Number:	See product label.
Appearance:	Pale yellow solid
Molecular Formula:	$C_{16}H_{13}NO_3$
Molecular Weight:	267.3
Purity:	>95%, as assessed by HPLC.
Summary:	PD98059 is a potent and selective cell permeable inhibitor of MAP kinase kinase (MEK). It selectively blocks the activation of MEK, thereby inhibiting the phosphorylation and the activation of MAP kinase. In pheochromocytoma (PC12) cells, it completely blocks the increase in MAP kinase activity produced by NGF. PD98059 is an invaluable tool to help elucidate the role of the MAPK cascade in a variety of biological systems.
Biological Activity:	$IC_{50} = 2 \mu M.$
Solubility:	Soluble in DMSO at a concentration of 6.5 mg/mL; soluble at a concentration of 25 mg/mL in anhydrous DMSO; and soluble in ethanol at a concentration of 0.6 mg/mL. It is recommended that this compound be diluted directly from the DMSO stock into buffered media with stirring. Please note that bovine serum albumin at a concentration of 6.6 mg/mL has been observed to prevent the precipitation of PD98059 in aqueous media.
Sterility:	This product is not sterile.
Storage:	Store, as supplied, at -20° C. 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.
CAUTION	Avoid contact with eyes, skin, and mucous membranes. Wear protective clothing when handling this product. Not for human use.
References:	Alessi, D.R., et al. (1995) PD 098059 is a specific inhibitor of the activation of mitogen-activated protein kinase kinase in vitro and in vivo. J. Biol. Chem. 270(46):27489–27494.
	Pang, L., et al. (1995) Inhibition of MAP kinase kinase blocks the differentiation of PC–12 cells induced by nerve growth factor. J. Biol. Chem. 270(23):13585–13588.
	Romerio, F. and D. Zella (2002) MEK and ERK inhibitors enhance the anti-proliferative effect of interferonalpha2b. FASEB J. 16(12):1680–1682.
	Yeh, P.Y., et al. (2002) Increase of the resistance of human cervical carcinoma cells to cisplatin by inhibition of the MEK to ERK signaling pathway partly via enhancement of anticancer drug-induced NF kappa B activation. Biochem. Pharmacol. 63(8):1423–1430.
	Wang, X. and G.P. Studzinski (2001) Phosphorylation of raf-1 by kinase suppressor of ras is inhibited by "MEK–specific" inhibitors PD98059 and U0126 in differentiating HL60 cells. Exp. Cell. Res. 268(2):294–300.

Related Products:

Product	Catalog no.
MEK1&2 [pS ²²²] antibody	44-452
MEK1 [pT ²⁹²] antibody	44-458G
MEK1 [pS ²⁹⁸] antibody	44-460G
MEK1 [pT ³⁸⁶] antibody	44-462G
MEK2 [pT ³⁹⁴] (human) antibody	44-466G
MEK2 [pT ³⁹⁴] (murine) antibody	44-468G
c-Raf [pYpY ^{340/341}] antibody	44-506G
ERK1&2 [pTpY ^{185/187}] antibody	44-680G

Explanation of Symbols

The symbols present on the product label are explained below:

Symbol	Description
REF	Catalog Number
RUO	Research Use Only
	Use by
	Manufacturer
[-]	Without, does not contain
e cote co	Protect from light
<u> </u>	Directs the user to consult instructions for use (IFU), accompanying the product.

Symbol	Description
LOT	Batch code
IVD	In vitro diagnostic medical device
1	Temperature limitation
EC REP	European Community authorized representative
[+]	With, contains
Ţ	Consult accompanying documents

Limited Use Label License: Research Use Only

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 $\label{lem:continuous} \textbf{For Research Use Only. Caution: Not for human or animal the rapeutic or diagnostic use.}$

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