



### Catalog # 10-2159

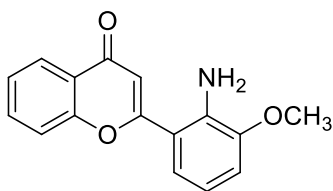
#### PD-98059

CAS# 167869-21-8

2-(2-Amino-3-methoxyphenyl)-4H-1-benzopyran-4-one

2'-Amino-3'-methoxyflavone

Lot # X102063



Inhibitor of mitogen-activated protein kinase kinase (MKK / MEK). Acts via binding to the inactivated form of MEK, preventing its phosphorylation by cRAF or MEK kinase ( $IC_{50}=2-7 \mu M$ ).<sup>1,2</sup> Accelerates differentiation of RAW264.7 cells into osteoclast-like cells.<sup>3</sup> Mimics BMP4 in supporting self renewal of embryonic stem cells<sup>4</sup>.

- 1) Alessi *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** 27489
- 2) Dudley *et al.* (1995), *A synthetic inhibitor of the mitogen-activated protein kinase cascade*; Proc. Natl. Acad. Sci., **92** 7686
- 3) Hotokezaka *et al.* (2002) *U0126 and PD98059, specific inhibitors of MEK, accelerate differentiation of RAW264.7 cells into osteoclast-like cells*; J. Biol. Chem., **277** 47366
- 4) Xiaoxia *et al.* (2004) *BMP4 supports self-renewal of embryonic stem cells by inhibiting mitogen-activated protein kinase pathways*; Proc. Natl. Acad. Sci. USA **101** 6027

#### PHYSICAL DATA

Molecular Weight:	267.29
Molecular Formula:	C <sub>16</sub> H <sub>13</sub> NO <sub>3</sub>
Purity:	98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (up to 6 mg/ml)
Physical Description:	Yellow solid
Storage and Stability:	Store as supplied at room temperature for up to 2 years from the date of purchase. Solutions in DMSO may be stored at -20°C for up to 3 months

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