Cat No. 77-I42

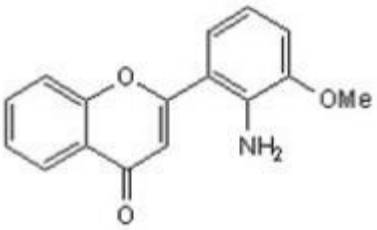
PD98059

2mg

For research purposes only

PD98059 is a highly selective noncompetitive inhibitor of MEK1 and MEK2. It prevents the activation of MAPKK1 by Raf or MEK kinase with an IC50 of 2-7µM, but does not inhibit Raf-activated MAPKK1. At concentrations up to 100µM, PD98059 does not inhibit activation of MKK3 or SEK as determined by measuring phosphorylation at its activation site. PD98059 has been shown to inhibit cell growth and proliferation in acute myelogenous leukemia (AML) cell lines and causes G1 arrest by blocking p53-dependent p21 induction.

TECHNICAL INFORMATION



Other Names: 2-(2-amino-3-methoxyphenyl)-4H-1-benzopyran-4-one

Chemical Formula: $C_{16}H_{13}NO_3$

CAS Number: 167869-21-8

Molecular Weight: 267.3

Purity: >98%

Appearance: Crystalline solid

Solubility: DMSO

STORAGE AND HANDLING

Storage: Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

PRODUCT USE

Soluble to 25mM in DMSO. Soluble to 5mM in ethanol. If precipitate is observed, vortex for 5 minutes. For most cells the maximum tolerance to DMSO is <0.5%.

REFERENCES

1. Kojima et al. (2007) Mitogen-activated protein kinase kinase inhibition enhances nuclear proapoptotic function of p53 in acute myelogenous leukemia cells. Cancer Res. 67(7):3210-9.
2. Dudley et al. (1995) A synthetic inhibitor of the mitogen-activated protein kinase cascade. Proc Natl Acad Sci U.S.A. 92(17):7686-9.
3. Alessi et al. (1995) PD 098059 is a specific inhibitor of the activation of mitogen-activated protein kinase kindase in vitro and in vivo. J Biol Chem 270 (46):27489-94.