



# Data Sheet

Research Use Only

## Compound Name

PD98059

## Catalog Number

SM28

## Activity

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.

## Purity

>99%

## Formula

C<sub>16</sub>H<sub>13</sub>NO<sub>3</sub>

## Solubility

DMSO, ethanol

## Alternative Names

PD 98059, 2'-Amino-3'-methoxyflavone, 2-(2-amino-3-methoxyphenyl)-4H-1-Benzopyran-4-one

## Effect

PD98059 inhibits cell growth and reverses the phenotype of ras-transformed BALB3T3 mouse fibroblasts and rat kidney cells. PD98059 inhibits cell growth and proliferation in acute myelogenous leukemia (AML) cell lines and causes G1 arrest by blocking p53-dependent p21 induction. This small molecule also enhances embryonic stem cell (ESC) self-renewal.

## CAS

167869-21-8

## Molecular Weight

267.28

## Stability

Stable at -20°C. Keep away from direct sunlight.

## References

1. Alessi, DR., et al. 1995. J Biol Chem. 270(46): 27489-27494. PMID: 7499206
2. Dudley, DT., et al. 1995. Proc Natl Acad Sci U S A. 92(17): 7686-7689. PMID: 7644477
3. Tsang, F., et al. 1998. Br J Pharmacol. 125(1): 61-68. PMID: 9776345
4. Qi, X., et al. 2004. Proc Natl Acad Sci U S A. 101(16): 6027-6032. PMID: 15075392
5. Kojima, k., et al. 2007. Cancer Res. 67(7): 3210-3219. PMID: 17409429