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Molecular Tools for the Life Science Community

Certificate of Analysis

PD 98059

Cat. #: P-260

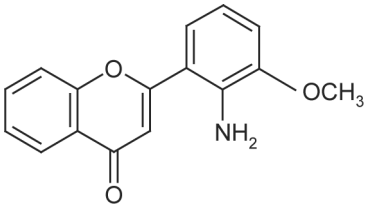
Source description: Synthetic.

M.W.: 267.28 daltons.

Purity: >99%.

Effective concentration: 1-80 µM.

Structure:



Chemical name: 2-(2-Amino-3-methoxyphenyl)-4H-1-benzopyran-4-one.

Molecular formula: $C_{16}H_{13}NO_3$.

CAS No.: 167869-21-8.

Activity: PD 98059 specifically inhibits the mitogen-activated protein kinase kinase (MAPKK) also known as MEK1 and MEK2. It is commonly used in studies of the MAPK pathway.

References:
1. Dudley, D.T. *et al.* (1995) *Proc. Natl. Acad. Sci. U.S.A.* **92,** 7686.

Sizes: 1 mg, 5 x 1 mg, 5 mg or 10 x 0.1 mg lyophilized powder.

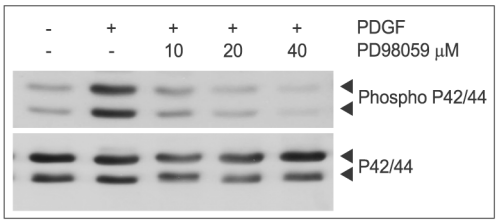
Storage before reconstitution: Lyophilized powder can be stored intact at room temperature for several weeks. For longer periods, it should be stored at -20°C.

Reconstitution: DMSO. Centrifuge all product preparations before use (10000 x g 5 min).

Storage and stability after reconstitution: Up to two weeks at 4°C or six months at -20°C.

Protect from light.

Bioassay: PD 98059 inhibits P42/44 MAPK (ERK) phosphorylation via MEK in C6 glioma cells.



Cells were grown to 70% confluence and serum starved for 1.5 h. The cells were then incubated for 2 h with various concentrations of **PD 98059** (#P-260) and stimulated with 7 ng/ml PDGF-AA. Cell proteins were resolved by SDS-PAGE and probed with anti-phospho-P42/44 (upper panel) and with anti-P42/44 (lower panel) antibodies. Inhibition of P42/44 phosphorylation by PD 98059 was dose-dependent.

For research purposes only, not for human use.
Last Update: May, 2010.