

Hello Bio, Inc.
304 Wall St., Princeton, NJ 08540 USA

T. 609-683-7500
F. 609-228-4994

customercare-usa@hellobio.com



DATASHEET

PD 98059

Product overview

| | |
|--------------------------|--|
| Name | PD 98059 |
| Cat No | HB2244 |
| Biological action | Inhibitor |
| Purity | >98% |
| Description | Selective MEK1/MAP2K inhibitor. Enhances ESC self-renewal. |

Images



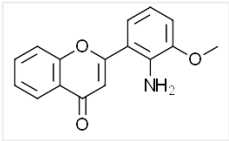
Biological Data

| | |
|-------------------------------|--|
| Biological description | Selective MEK1/MAP2K inhibitor (IC ₅₀ values are 2 and 50 μM at MEK1 and MEK2 respectively). Binds to inactivated MEK to prevent its phosphorylation by MEK kinase or c-Raf. Inhibits cell growth and proliferation and induces modest apoptosis. Also enhances embryonic stem cell self-renewal. Active <i>in vivo</i> . |
|-------------------------------|--|

Solubility & Handling

| | |
|-----------------------------|---|
| Storage instructions | Room temperature |
| Solubility overview | Soluble in DMSO (25mM) and in ethanol (5mM) |
| Important | This product is for RESEARCH USE ONLY and is not intended for therapeutic or diagnostic use. Not for human or veterinary use. |

Chemical Data

| | |
|---------------------------|---|
| Chemical name | 2-(2-Amino-3-methoxyphenyl)-4H-1-benzopyran-4-one |
| Molecular Weight | 267.28 |
| Chemical structure |  |
| Molecular Formula | C ₁₆ H ₁₃ NO ₃ |
| CAS Number | 167869-21-8 |

| | |
|--------------------|--|
| PubChem identifier | 4713 |
| SMILES | <chem>COC1=CC=CC(=C1N)C2=CC(=O)C3=CC=CC=C3O2</chem> |
| InChi | InChI=1S/C16H13NO3/c1-19-14-8-4-6-11(16(14)17)15-9-12(18)10-5-2-3-7-13(10)20-15/h2-9H,17H2,1H3 |
| InChiKey | QFWCYNPOPKQOKV-UHFFFAOYSA-N |
| MDL number | MFC00671789 |

References

PD 098059 is a specific inhibitor of the activation of mitogen-activated protein kinase kinase in vitro and in vivo.

Alessi DR *et al* (1995) J Biol Chem 270(46)

PubMedID [7499206](#)

A synthetic inhibitor of the mitogen-activated protein kinase cascade.

Dudley DT *et al* (1995) Proc Natl Acad Sci U S A 92(17)

PubMedID [7644477](#)

U0126 and PD98059, specific inhibitors of MEK, accelerate differentiation of RAW264.7 cells into osteoclast-like cells.

Hotokezaka H *et al* (2002) J Biol Chem 277(49)

PubMedID [12237315](#)

Inhibition of MAP kinase kinase blocks the differentiation of PC-12 cells induced by nerve growth factor.

Pang L *et al* (1995) J Biol Chem 270(23)

PubMedID [7775407](#)

Pre-LTP requires extracellular signal-regulated kinase in the ACC.

Yamanaka *et al* (2016) Mol Pain 12

PubMedID [27178245](#)
