

Store at
-20°C
#79241

PD 0325901

5 mg



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For Research Use Only. Not for Use in Diagnostic Procedures.

Background

PD 0325901 is a potent and selective non-ATP competitive MEK inhibitor. This small molecule is highly effective at inhibiting cell growth and proliferation in various cancer cells (1). The potency of PD 0325901 has been illustrated by the inhibition of ERK phosphorylation in mouse and human cell models with an IC₅₀ of 0.33 nM and between 20-50 nM, respectively (1,2). PD 0325901 increases the self-renewal of mouse embryonic stem cells (mESCs) by enhancing the expression of pluripotency genes and acts as an antagonist for retinoic acid (RA) induced cell differentiation (3).

Molecular Formula

C₁₆H₁₄F₃IN₂O₄

Molecular Weight

482.2 g/mol

Purity

>98%

CAS

391210-10-9

Solubility

Soluble in DMSO at 12 mg/ml.

Storage

Store lyophilized at -20°C, desiccated. In lyophilized form, the chemical is stable for 24 months. Once in solution, store at -20°C and use within 3 months to prevent loss of potency. *Aliquot to avoid multiple freeze/thaw cycles.*

Directions for Use

PD 0325901 is supplied as a lyophilized powder. For a 10 mM stock, reconstitute 5 mg of powder in 1.03 ml of DMSO. Working concentrations and length of treatment can vary depending on the desired effect.

Background References

1. Ciuffreda, L. et al. (2009) *Neoplasia* 11, 720-31.
2. Barrett, S.D. et al. (2008) *Bioorg Med Chem Lett* 18, 6501-4.
3. Ai, Z. et al. (2016) *Stem Cells Int* 2016, 1792573.

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