

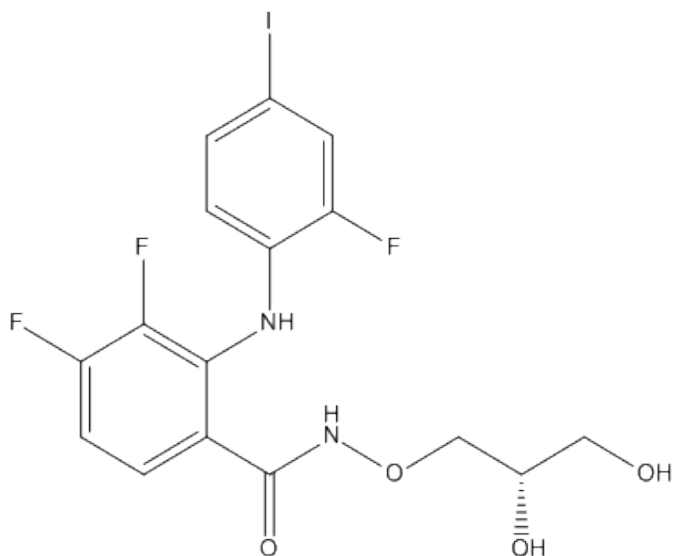
Cat No. 39-C68

PD0325901

2mg

PD0325901 is an organic molecule targeting mitogen-activated protein kinase (MAPK/ERK kinase or MEK). PD0325901 is a derivative of MEK inhibitor CI-1040 and selectively binds to and inhibits MEK which may result in the inhibition of the phosphorylation and activation of MAPK/ERK and the inhibition of tumor cell proliferation. In combination with CHIR99021, PD0325901 has been shown to prevent cell differentiation and sustain ES cell self-renewal.

TECHNICAL INFORMATION



Other Names: N-[(2R)-2,3-Dihydroxypropoxy]-3,4-difluoro-2-[(2-fluoro-4-iodophenyl)amino]-benzamide

Chemical Formula: C₁₆H₁₄F₃IN₂O₄

CAS Number: 391210-10-9

Molecular Weight: 482.2

Purity: 99.7% by HPLC

IC₅₀= 1nM

Appearance: Off-white solid

Solubility: DMSO (20 mg/ml) of EtOH (20 mg/ml)



For research purposes only

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 in DMSO (100 mM). For a 10 mM concentrated stock solution, reconstitute the compound by adding 415 µl of DMSO to the entire contents of the vial.

Note: for most cells, the maximum tolerance to DMSO is <0.5%. Incubate in a 37°C water bath for 5 minutes if precipitate is observed.

When used in combination with CHIR99021, PD0325901 has been shown to sustain ES cell self-renewal.

REFERENCES

1. Barrett S. et al. (2008) The discovery of the benzhydroxamate MEK inhibitors CI-1040 and PD 0325901. *Bioorg. Med. Chem. Lett.* 18: 6501-6504.
2. Lin T. et al. (2009) A chemical platform for improved induction of human iPSCs. *Nature Meth.* 6: 805-808
3. Bain J. et al. (2007) The selectivity of protein kinase inhibitors: a further update. *Biochem J.* 408: 297-315.