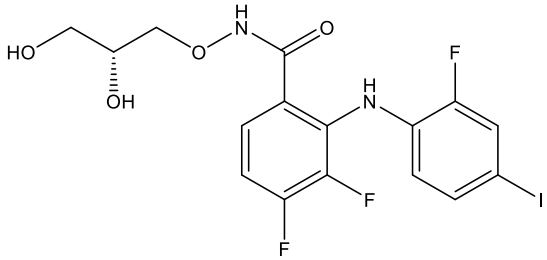
Catalog # 10-2161

PD 0325901

CAS# 391210-10-9

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

Lot # FBA1066



A selective non-ATP competitive MEK inhibitor (IC_{50} = 0.33 nM).[1] Inhibits growth and/or proliferation of a variety of cancer cells.[2] Enhances self-renewal of embryonic stem cells.[3] In combination with vitamin C, synergistically induces hypomethylation of mouse embryonic stem cells.[4] In combination with CHIR-99021 and A83-01 induces generation of ground state iPS cells from human and rat somatic cells.[5]

1) Sebolt-Leopold *et al*. (2004), *The biological profile of PD0325901: A second generation analog of CI-1040 with improved pharmaceutical potential*; Proc. Amer. Assoc. Cancer Res., **45** 925
2) Ciuffreda *et al*. (2009), *Growth-inhibitor and antiangiogenic activity of the MEK inhibitor PD0325901 in malignant melanoma with or without BRAF mutations*; Neoplasia, **11** 720
3) Ai *et al.* (2016), *Maintenance of Self-Renewal and Pluripotency in J1 Mouse Embryonic Stem Cells through Regulating Transcription Factor and MicroRNA Expression Induced by PD0325901*; Stem Cells Int., **2016** 1792573
4) Li *et al.* (2016), *MEK inhibitor PD0325901 and vitamin C synergistically induce hypomethylation of mouse embryonic stem cells*; Oncotarget, **7** 39730
5) Li *et al*. (2009), *Generation of rat and human induced pluripotent stem cells by combining genetic reprogramming and chemical inhibitors*; Cell Stem Cell, **4** 16

PHYSICAL DATA

Molecular Weight:	482.20
Molecular Formula:	$C_{16}H_{14}F_3IN_2O_4$
Purity:	98%
	NMR: (Conforms)
Solubility:	DMSO (up to 20 mg/ml) or Ethanol (up to 20 mg/ml)
Physical Description:	White solid
Storage and Stability:	Store as supplied at room temperature for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at -20°C for up to 3 months.

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