# PD0325901

## Reprogramming Enhancer -MEK Inhibitor

Catalog # inh-pd32

## For research use only

Version # 10C17-MM

## PRODUCT INFORMATION

#### **Content:**

• 2 mg PD0325901

#### Storage and stability:

- PD0325901 is provided as a crystalline solid and shipped at room temperature. Store at -20°C. Solid product is stable 1 year at -20°C. Protect from light.
- Upon resuspension in an organic solvent (DMSO/ethanol/DMF), PD0325901 should be aliquoted and stored at -20°C. Avoid repeated freeze-thaw cycles. Resuspended product is stable for 3 months at -20°C when properly stored.
- An aqueous solution can be obtained by diluting the organic solvent into aqueous buffer or isotonic saline. We do not recommend storing the aqueous solution for more than 1 day.

## **CHEMICAL PROPERTIES**

**CAS number:** 391210-10-9

**Synonym:** N-[(2R)-2,3-dihydroxypropoxy]-3,4-difluoro-2-[(2-

fluoro-4-iodophenyl)amino]-benzamide

**Formula:** C16H14F3IN2O4 **Molecular weight:** 482.19

**Solubility:** DMSO, ethanol, DMF (20 mg/ml) **Appearance:** White to off-white solid

**Purity:** >98% (HPLC)

## DESCRIPTION

PD0325901 is a synthetic organic molecule that selectively binds to and inhibits mitogen-activated protein kinase kinase (MEK). The MEK/ERK signaling pathway plays an important role in the self-renewing state of ES cells<sup>1</sup>. Inhibition of this pathway combined with the inhibition of other signaling pathways has been shown to improve the efficiency of iPS cell generation. Combination of PD0325901 with a TGF-b receptor inhibitor was found to improve the reprogramming of OSKM-infected human fibroblasts<sup>2</sup>.

- 1. Ying QL.  $\it et al.$ , 2008. The ground state of embryonic stem cell self-renewal. Nature. 453(7194):519-23.
- 2. Lin T. *et al.*, 2009. A chemical platform for improved induction of human iPSCs. Nat Methods. 6(11):805-8.

Working concentration: 0.5 µM

## RELATED PRODUCTS

Product	Catalog Code
5-Aza-cytidine	inh-aza
Bix-01294	inh-bix
SB431542	inh-sb43
Valproic acid	inh-vpa
LENTI-Smart™ OSKM (human)	ltsint-hoskm-5
LENTI-Smart <sup>™</sup> OSKM (mouse)	ltsint-moskm-5

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