SB431542
Reprogramming Enhancer - TGF-β Receptor Inhibitor
Catalog # inh-sb43

For research use only
Version # 10C17-MM

PRODUCT INFORMATION

Content:
• 5 mg SB431542

Storage and stability:
- SB431542 is provided as a crystalline solid and shipped at room temperature. Store at -20°C. Solid product is stable 1 year at -20°C.
- Upon resuspension in an organic solvent (DMSO/ethanol/DMF), SB431542 should be aliquoted and stored at -20°C. Avoid repeated freeze-thaw cycles. SB431542 resuspended in an organic solvent 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: 301836-41-9
Synonym: 4-{5-Benzo[1,3]dioxol-5-yl-4-pyrdln-2-yl-1H-imidazol-2-yl}-benzamide hydrate, 4-{4-(3,4-Methylenedioxyphenyl)-5-(2-pyridyl)-1H-imidazol-2-yl}-benzamide hydrate, 4-{4-(1,3-Benzodioxol-5-yl)-5-(2-pyridinyl)-1H-imidazol-2-yl}-benzamide hydrate
Formula: C22H16N4O3
Molecular weight: 384.39
Solubility: approx. 20 mg/ml in DMSO, DMF. Approx. 2 mg/ml in ethanol
Appearance: White to off-white solid
Purity: >99% (HPLC)

DESCRIPTION

SB431542 is a potent and selective inhibitor of transforming growth factor-β (TGF-β) superfamily type I activin receptor-like kinase (ALK) receptors, specifically ALK4, ALK5 and ALK7. Inhibition of TGF-β signaling is known to induce the de-repression of epithelial fate and thus was hypothesized to benefit the reprogramming process. Indeed, treatment of OSKM-transduced human primary fibroblasts with a combination of SB431542 and PD0325901, a MEK inhibitor, was found to improve reprogramming efficiency of human cells.

Working concentration: 2 µM

RELATED PRODUCTS

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<td>inh-aza</td>
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<td>Bix-01294</td>
<td>inh-bix</td>
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<td>PD0325901</td>
<td>inh-pd32</td>
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<td>Valproic acid</td>
<td>inh-vpa</td>
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<td>LENTI-Smart™ OSKM (human)</td>
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<tr>
<td>LENTI-Smart™ OSKM (mouse)</td>
<td>ltsint-moskm-5</td>
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