

# ALK5 Inhibitor II

## TGF- $\beta$ type I receptor kinase (ALK5) inhibitor

ALK5 inhibitor II is a cell permeable, potent, selective and ATP-competitive inhibitor of TGF- $\beta$  RI kinase ( $IC_{50}=23nM$ ,  $4nM$  and  $18nM$  for binding, auto-phosphorylation, and cellular assay in HepG2 cells of TGF- $\beta$  RI kinase, respectively). It minimally affects a panel of nine closely related kinases including p38 MAPK and GSK3 ( $IC_{50}>16\mu M$ ). It can be used for the induction of the pluripotency of stem cells by replacing the transcription factor SOX2 via the inhibition of TGF- $\beta$  signaling and inducing the expression of the transcription factor Nanog.

Citations: 52

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- Potent ATP-competitive inhibitor of the TGF- $\beta$  type I receptor ALK5
- Useful for cellular reprogramming and the culture of human pluripotent stem cells
- Active *in vitro* and *in vivo*
- GMP format available

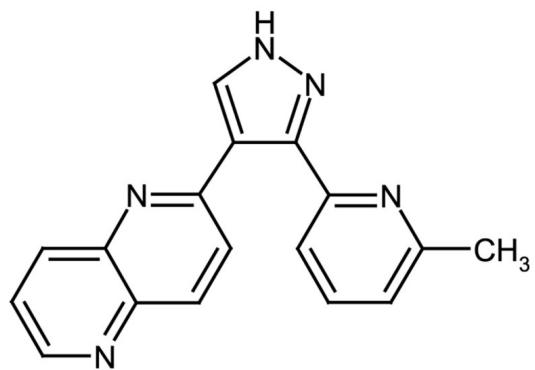
## Ordering Information

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ALX-270-445-M001	1mg
ALX-270-445-M005	5mg

## Manuals, SDS & CofA

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# Handling & Storage

<b>Use/Stability</b>	As indicated on product label or CoA when stored as recommended. Stable for 2 years after receipt when stored at -20°C. Stock solutions are stable for up to 6 months when stored at -20°C.
<b>Handling</b>	Protect from light.
<b>Long Term Storage</b>	-20°C
<b>Shipping</b>	Ambient Temperature

## Regulatory Status

RUO - Research Use Only

## Product Details

<b>Alternative Name</b>	TGF-β RI Kinase Inhibitor II, 2-(3-(6-Methylpyridin-2-yl)-1H-pyrazol-4-yl)-1,5-naphthyridine, RepSox, E-616452, SJN 2511
<b>Appearance</b>	White to off-white or yellow solid.
<b>CAS</b>	446859-33-2
<b>Couple Target</b>	TGF-beta receptor
<b>Couple Type</b>	Inhibitor
<b>Formula</b>	$C_{17}H_{13}N_5$
<b>Identity</b>	Identity determined by NMR.
<b>MW</b>	287.3
<b>Purity</b>	≥98% (HPLC)
<b>Solubility</b>	Soluble in DMSO (5 mg/ml) or methanol (5 mg/ml).

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