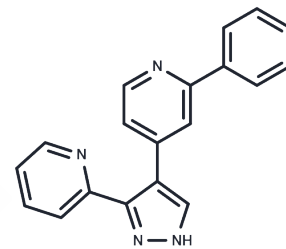


GW-6604

## Chemical Properties

CAS No. : 452342-37-9  
 Formula: C<sub>19</sub>H<sub>14</sub>N<sub>4</sub>  
 Molecular Weight: 298.34  
 Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year  
 Actual storage temperature shall be subject to the COA.



## Biological Description

Description	GW-6604, an ALK5 inhibitor, exhibits clear antifibrotic effects leading to improved liver function.
Targets(IC50)	ALK,PAI-1,TGF-beta/Smad
In vitro	GW-6604 inhibited autophosphorylation of ALK5 with an IC50 of 140 nM and in a cellular assay inhibited TGF-beta-induced transcription of PAI-1 (IC50 = 500 nM)[2].
In vivo	GW-6604 (40 mg/kg p.o.) increased liver regeneration in TGF-beta-overexpressing mice, which had undergone partial hepatectomy. In an acute model of liver disease, GW-6604 reduced by 80% the expression of collagen IA1. In a chronic model of DMN-induced fibrosis where DMN was administered for 6 weeks and GW-6604 dosed for the last 3 weeks (80 mg/kg p.o., b.i.d.), mortality was prevented and DMN-induced elevations of mRNA encoding for collagen IA1, IA2, III, TIMP-1 and TGF-beta were reduced by 50-75%. Inhibition of matrix genes overexpression was accompanied by reduced matrix deposition and reduction in liver function deterioration, as assessed by bilirubin and liver enzyme levels[2].

## Solubility Information

Solubility	DMSO: 2.99 mg/mL (10.02 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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### Preparing Stock Solutions

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	<b>1mg</b>	<b>5mg</b>	<b>10mg</b>
1 mM	3.3519 mL	16.7594 mL	33.5188 mL
5 mM	0.6704 mL	3.3519 mL	6.7038 mL
10 mM	0.3352 mL	1.6759 mL	3.3519 mL
50 mM	0.067 mL	0.3352 mL	0.6704 mL

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Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

### Reference

de Gouville AC, Huet S. Inhibition of ALK5 as a new approach to treat liver fibrotic diseases. Drug News Perspect. 2006 Mar;19(2):85-90.

de Gouville AC, et al. Inhibition of TGF-beta signaling by an ALK5 inhibitor protects rats from dimethylnitrosamine-induced liver fibrosis. Br J Pharmacol. 2005 May;145(2):166-77.

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