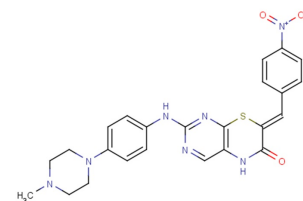


ON 146040

**Chemical Properties**

|                   |  |
|-------------------|--|
| CAS No.:          | 1404231-34-0   |
| Formula:          | C <sub>24</sub> H <sub>23</sub> N <sub>7</sub> O <sub>3</sub> S        |
| Molecular Weight: | 489.55   |
| Appearance:       | N/A  |
| Storage:          | 0-4°C for short term (days to weeks), or -20°C for long term (months). |

**Biological Description**

|                            |  |
|----------------------------|--|
| Description                | ON 146040 is a potent inhibitor of PI3K $\alpha$ and PI3K $\delta$ (IC <sub>50</sub> $\approx$ 14 and 20 nM, respectively) .   |
| Targets(IC <sub>50</sub> ) | PI3K $\alpha$ : 14 nM<br>PI3K $\delta$ : 20 nM<br>PI3K $\gamma$ : 1 $\mu$ M<br>PI3K $\beta$ : 3 $\mu$ M<br>Abl1: 150 nM  |
| In vitro                   | ON 146040 was highly potent in killing hematologic tumor cells with IC <sub>50</sub> values in the 150 to 1,000 nM range. In biochemical testing, ON 146040 inhibited PI3K $\alpha/\delta$ isoforms (IC <sub>50</sub> 14 and 20 nM, respectively) without having a major effect on $\beta/\gamma$ isoforms (IC <sub>50</sub> 3 and 1 $\mu$ M, respectively). ON 146040 was also found to inhibit Abl1 and several mutant versions of this kinase (IC <sub>50</sub> < 150 nM), although the compound was not found to be active against the T315I mutant. Following treatment with ON 146040, STAT3 and STAT5 phosphorylation were down-regulated in leukemia and myeloma cells |

**Solubility Information**

|            |   |
|------------|---|
| Solubility | < 1 mg/ml refers to the product slightly soluble or insoluble |
|------------|---|

## Preparing Stock Solutions

|       | 1mg      | 5mg       | 10mg      |
|-------|----------|-----------|-----------|
| 1 mM  | 2.043 mL | 10.213 mL | 20.427 mL |
| 5 mM  | 0.409 mL | 2.043 mL  | 4.085 mL  |
| 10 mM | 0.204 mL | 1.021 mL  | 2.043 mL  |
| 50 mM | 0.041 mL | 0.204 mL  | 0.409 mL  |

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. The storage conditions and period of the stock solution: - 80 °C for 6 months; - 20 °C for 1 month. Please use it as soon as possible.

## Reference

1. Targeting oncogenic STAT3 and STAT5 signaling with on 146040, a small molecule inhibitor of PI3K  $\alpha/\delta$  and BCR-ABL.

Inhibitors · Natural Compounds · Compound Libraries

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use.

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