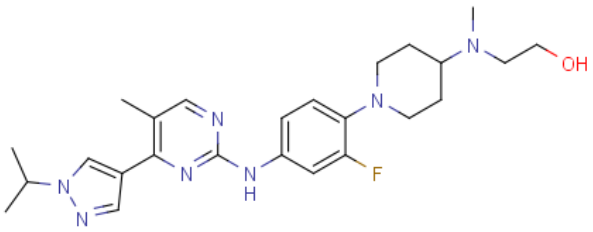
# Name: Flonoltinib maleate Cat#: EX-A6364

Chemical Structure:

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| Chemical Name | Ethanol, 2-[[1-[2-fluoro-4-[[5-methyl-4-[1-(1-methylethyl)-1H-pyrazol-4-yl]-2-pyrimidinyl]amino]phenyl]-4-piperidinyl]methylamino]- |

| | | | |
|---|---|---|---|
| Molecular Weight | 467.58 | Storage | 3 years -20°C powder<br>6 months -80°C in solvent |
| Formula | C25H34FN7O | | |
| CAS No. | 2387765-27-5 | Synonyms | JAK2/FLT3-IN-1 |

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|---|---|---|---|
| Solubility (25°C) * | In vitro | DMSO | Soluble |
| | | Ethanol | N/A |
| | | Water | N/A |
| | In vivo （should be freshly prepared each time） | | |

* <1 mg/ml means slightly soluble or insoluble.
* Please note that Selleck tests the solubility of all compounds in-house, and the actual solubility may differ slightly from published values. This is normal and is due to slight batch-to-batch variations.

Preparing Stock Solutions:

| Mass / Volume / Concentration | 1 mg | 5 mg | 10 mg |
|---|---|---|---|
| 1 mM | 2.1387 mL | 10.6934 mL | 21.3867 mL |
| 5 mM | 0.4277 mL | 2.1387 mL | 4.2773 mL |
| 10 mM | 0.2139 mL | 1.0693 mL | 2.1387 mL |

*The above data is based on the product molecular weight 467.58.

Biological Activities:

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| **Description** | JAK2/FLT3-IN-1 is a potent and orally active dual JAK2/FLT3 inhibitor with IC50 values of 0.7 nM, 4 nM, 26 nM and 39 nM for JAK2, FLT3, JAK1 and JAK3, respectively. JAK2/FLT3-IN-1 has anti-cancer activity. |

| $IC_{50}$ & Target | JAK2 | FLT3 | JAK1 | JAK3 |
|---|---|---|---|---|
| | 0.7 nM (IC50) | 4 nM (IC50) | 26 nM (IC50) | 39 nM (IC50) |

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| In Vitro | JAK2/FLT3-IN-1 (0.008-1 μM; for 2 hours) down-regulates p-FLT3 in a dose-dependent manner[1].<br>JAK2/FLT3-IN-1 (5-100 nM; for 2 hours) has a dose-dependent effect on the induction of apoptosis in the MV4-11 cells[1].<br>JAK2/FLT3-IN-1 (5-100 nM; for 2 hours) strongly induces cell cycle arrest with a G1/G0 percentage of 85% at 100 nM in the MV4-11 cells[1]. |

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| In Vivo | JAK2/FLT3-IN-1 (30 and 60 mg/kg/day; p.o.; for 14 days) exhibits significant antitumor effects[1]. |

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| **References** | [1]. Yang T, et al. Discovery of Potent and Orally Effective Dual JAK2/FLT3 Inhibitors for the Treatment of AcuteMyelogenous Leukemia and Myeloproliferative Neoplasms. J Med Chem. 2019 Oct 31. |