

## PP242

**Catalog #:** 27063

**Lot #:** 170410

**Size:** 10 mg

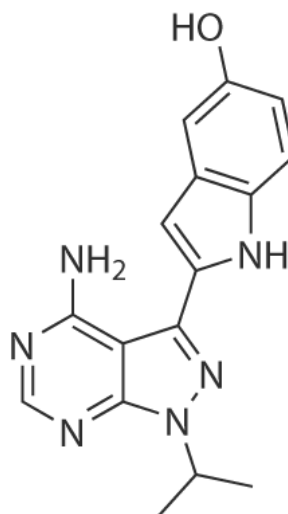
**Structure:**

**CAS Registry #:** 1092351-67-1

**Purity:** ≥99%

**Chemical Formula:** C<sub>16</sub>H<sub>16</sub>N<sub>6</sub>O

**Molecular Weight:** 308.3 Da



**Description:** PP242 is an inhibitor at the kinase domain of the mammalian target of rapamycin (mTOR), which is a Ser/Thr kinase and a cell growth controller. PP242 inhibits mTORC1 more effectively than rapamycin. Unlike rapamycin, PP242 inhibits both mTORC1 and mTORC2 with IC<sub>50</sub> values of 0.03 and 0.058 μM, respectively and it can inhibit cap-dependent translation. PP242 functions by blocking the phosphorylation of Akt at S473 and preventing mTOR activation. PP242 exhibits IC<sub>50</sub> values for other kinases of 0.11 μM (JAK2), 0.41 μM (DNAPK), 0.05 μM (PKC?), 0.2 μM (PKCβ I and II), 4.4 μM (EGFR), and 1.5 μM (VEGFR2).

**Appearance:** White to off-white solid

**Solubility:** Soluble in DMSO

**Storage/Stability:** Store at or below -20°C. Solid form is stable at least 12 months from date of receipt, when stored as directed. Do not store aqueous solutions for more than one day.

### Reference:

1. Feldman, M.E., et al. PLoS Biol. 7: 371-383 (2009).