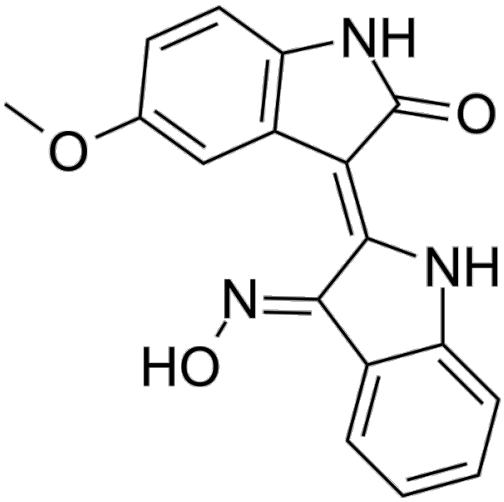
# Product Data Sheet

Product Name: KY19334
Cat. No.: GC81336

## Chemical Properties

| | | | |
|---|---|---|---|
| Cas. No. | 2319609-67-9 | | |
| Formula | $C_{17}H_{13}N_3O_3$ | M.Wt | 307.3 |
| Solubility | DMSO: 103 mg/mL (335.18 mM; Need ultrasonic) | Storage | Store at 4°C, away from moisture and light |
| General tips | For obtaining a higher solubility , please warm the tube at 37 °C and shake it in the ultrasonic bath for a while.Stock solution can be stored below -20°C for several months. | | |
| Shipping Condition | Evaluation sample solution : ship with blue ice All other available size: ship with RT , or blue ice upon request. | | |

Structure




## Background

KY19334 is a CXXC5-DVL inhibitor. KY19334 can activate the Wnt/β-catenin pathway by inhibiting CXXC5-Dvl interaction. KY19334 can inhibit cancer cells proliferation, migration, invasion and

transformation by inhibiting CDK1. KY19334 can accelerate wound healing and exert regenerative effects. KY19334 can be used for the researches of cancer, inflammation, metabolic and neurological disease, such as cutaneous squamous cell carcinoma and diabetes [1].

In Vivo, KY19334 (2 mM, topically application, 30 mins before each TPA) significantly inhibits the development of DMBA /TPA-induced skin cancer in C57BL/6 mice[1]. KY19334 (1 mM, topically application, daily for 16 days) accelerates wound healing in diabetic C57BL/6 mice[2].

In Vitro, KY19334 (5 μM, 72 h) inhibits the proliferation of human cutaneous squamous cell carcinoma (cSCC) cells HSC-1 and HSC-5, but exerts no significant proliferation inhibition on normal keratinocyte HaCaT cells[1]. KY19334 (5 μM, 24 h) significantly inhibits the migration and invasion of HSC-1 and HSC-5 cells[1]. KY19334 (5 μM, 2 weeks) inhibits the colony formation of HSC-1 and HSC-5 cells[1]. KY19334 (5 μM, 24 h) downregulates CDK1 expression and inhibits the Wnt/β-catenin signaling pathway in HSC-1 and HSC-5 cells[1]. KY19334 (1 mM, 7-16 days) activates the Wnt/β-catenin signaling pathway in keratinocytes, vascular endothelial cells, and fibroblasts of wound tissues from diabetic mice[2]. KY19334 (1 mM, 7 days) promotes the expression of angiogenesis-related proteins in CD31+ vascular endothelial cells of diabetic mouse wound tissues[2].

References:
[1]. Lee SH, et al. Novel small molecules downregulate CDK1 expression and inhibit Wnt/β-catenin signaling in cutaneous squamous cell carcinoma by targeting its distinct tumor-specific cellular landscape. Exp Mol Med. 2025 Sep;57(9):1996-2009.
[2]. Kim E, et al. Inhibiting the cytosolic function of CXXC5 accelerates diabetic wound healing by enhancing angiogenesis and skin repair. Exp Mol Med. 2023 Aug;55(8):1770-1782.