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# Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

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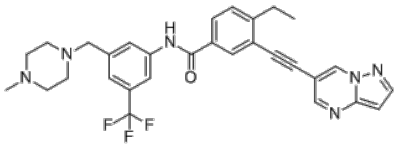
| **Product Name** | : | DDR1 inhibitor 7rh |
| **Cat. No.** | : | PC-63518 |
| **CAS No.** | : | 1429617-90-2 |
| **Molecular Formula** | : | $C_{30}H_{29}F_3N_6O$ |
| **Molecular Weight** | : | 546.598 |
| **Target** | : | Discoidin Domain Receptor (DDR) |
| **Solubility** | : | |



## Biological Activity

DDR1 inhibitor 7rh is a potent, selective, ATP-competitive, orally available **Discoidin domain receptor 1 (DDR1)** inhibitor with IC50 of 6.8 nM in cell-free kinase assays; DDR1 inhibitor 7rh is significantly less potent in suppressing the kinase activities of DDR2 (IC50=101 nM), Bcr-Abl (IC50=355 nM), and c-Kit (IC50>10 uM); inhibits DDR1-mediated signaling induced by soluble collagen (50 µg/ml) in a concentration-dependent manner, inhibits activation of PYK2 and PEAK1, signaling proteins downstream of DDR1 in PANC-1 cells; induces significant decrease of total protein levels of DDR1 and Bcl-xL, causes a significant reduction in the level of MMP-2 in NSCLS cells; suppresses the growth of K562 human CML cells with IC50 of 38 nM, A549, NCI-H23 and NCI-H460 human NSCLC cells with IC50 of 2.7, 2.1 and 3.0 µM, respectively; abrogates collagen-induced DDR1 signaling in pancreatic tumor cells and consequently reduces colony formation and migration, exhibits striking efficacy in combination with chemotherapy in orthotopic xenografts and autochthonous pancreatic tumors.

## References


Aguilera KY, et al. ***Mol Cancer Ther.*** 2017 Nov;16(11):2473-2485.

Gao M, et al. ***J Med Chem.*** 2013 Apr 25;56(8):3281-95.


**Caution: Product has not been fully validated for medical applications. Lab Use Only!**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