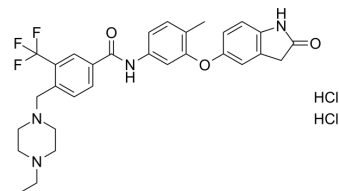


## DDR1-IN-1 dihydrochloride

<b>Cat. No.:</b>	HY-13979A
<b>CAS No.:</b>	1780303-76-5
<b>Molecular Formula:</b>	C <sub>30</sub> H <sub>33</sub> Cl <sub>2</sub> F <sub>3</sub> N <sub>4</sub> O <sub>3</sub>
<b>Molecular Weight:</b>	625.51
<b>Target:</b>	Discoidin Domain Receptor
<b>Pathway:</b>	Protein Tyrosine Kinase/RTK
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	DDR1-IN-1 dihydrochloride is a potent and selective DDR1 receptor tyrosine kinase inhibitor with an IC <sub>50</sub> of 105 nM; 4-fold less potent for DDR2 (IC <sub>50</sub> = 413 nM) <sup>[1]</sup> .					
<b>IC<sub>50</sub> &amp; Target</b>	<table border="1"> <tr> <td>DDR1</td> <td>DDR2</td> </tr> <tr> <td>105 nM (IC<sub>50</sub>)</td> <td>413 nM (IC<sub>50</sub>)</td> </tr> </table>	DDR1	DDR2	105 nM (IC <sub>50</sub> )	413 nM (IC <sub>50</sub> )	
DDR1	DDR2					
105 nM (IC <sub>50</sub> )	413 nM (IC <sub>50</sub> )					
<b>In Vitro</b>	<p>DDR1-IN-1 effectively blocks collagen-induced DDR1 pY513 autophosphorylation in U2OS cells (EC<sub>50</sub> = 86.76 nM) with excellent selectivity over a panel of &gt;380 kinases. DDR1-IN-1 inhibits DDR2-mediated MT1-MMP activation in human rheumatoid synovial fibroblasts (RASf) upon collagen stimulation (IC<sub>50</sub> &lt; 2.5 μM) and enhances PI3K/mTOR inhibitor GSK2126458 antiproliferation efficacy in SNU-1040 colorectal cancer culture<sup>[1]</sup>.</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>					

### CUSTOMER VALIDATION

- Cancers. 2020 Mar 31;12(4):841.
- Exp Ther Med. 2019 Mar;17(3):1593-1600.

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### REFERENCES

[1]. Kim HG, et al. Discovery of a potent and selective DDR1 receptor tyrosine kinase inhibitor. ACS Chem Biol. 2013 Oct 18;8(10):2145-50.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

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