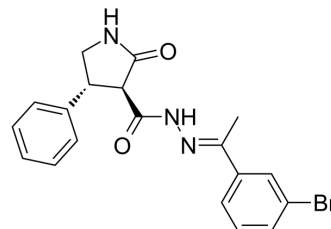


AC-264613

Cat. No.:	HY-14351
CAS No.:	1051487-82-1
Molecular Formula:	C ₁₉ H ₁₈ BrN ₃ O ₂
Molecular Weight:	400.27
Target:	Protease Activated Receptor (PAR)
Pathway:	GPCR/G Protein
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



BIOLOGICAL ACTIVITY

Description	AC-264613 is a potent and selective protease-activated receptor (PAR-2) agonist with a pEC ₅₀ of 7.5 ^[1] .								
IC₅₀ & Target	pEC ₅₀ : 7.5 (PAR-2) ^[1]								
In Vitro	<p>AC-264613 (10 μM; for 6 hours) causes a decrease of IRF5 expression and also significantly reduces p53 protein expression in macrophages^[2].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <p>Western Blot Analysis^[2]</p> <table border="1"> <tr> <td>Cell Line:</td> <td>Granulocyte-macrophage colony-stimulating factor (GM-CSF)-dependent macrophages</td> </tr> <tr> <td>Concentration:</td> <td>10 μM</td> </tr> <tr> <td>Incubation Time:</td> <td>6 hours</td> </tr> <tr> <td>Result:</td> <td>Significantly decreased IRF5 expression and reduced p53 protein levels.</td> </tr> </table>	Cell Line:	Granulocyte-macrophage colony-stimulating factor (GM-CSF)-dependent macrophages	Concentration:	10 μM	Incubation Time:	6 hours	Result:	Significantly decreased IRF5 expression and reduced p53 protein levels.
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Concentration:	10 μM								
Incubation Time:	6 hours								
Result:	Significantly decreased IRF5 expression and reduced p53 protein levels.								
In Vivo	<p>AC-264613 exhibits moderate elimination half-live (T_{1/2}=2.5±2.0 h) following i.p. administration (10 mg/kg) in male Sprague-Dawley rats^[3].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>								

REFERENCES

- [1]. Jimmi Gerner Seitzberg, et al. Discovery of potent and selective small-molecule PAR-2 agonists. *J Med Chem.* 2008 Sep 25;51(18):5490-3.
- [2]. Rui Yamaguchi, et al. A protease-activated receptor 2 agonist (AC-264613) suppresses interferon regulatory factor 5 and decreases interleukin-12p40 production by lipopolysaccharide-stimulated macrophages: Role of p53. *Cell Biol Int.* 2016 Jun;40(6):629-41
- [3]. Luis R Gardell, et al. Identification and characterization of novel small-molecule protease-activated receptor 2 agonists. *J Pharmacol Exp Ther.* 2008 Dec;327(3):799-808.

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

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