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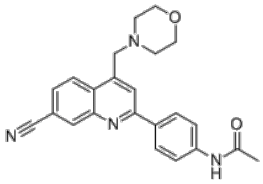
Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	RAGE229
Cat. No.	:	PC-72843
CAS No.	:	2143072-85-7
Molecular Formula	:	$C_{23}H_{22}N_4O_2$
Molecular Weight	:	386.455
Target	:	Other Targets
Solubility	:	10 mM in DMSO



Biological Activity

RAGE229 (RAGE-229) is a specific antagonist of **ctRAGE-DIAPH1** interaction, high potently binds to cytoplasmic tail of **RAGE** (ctRAGE) with KD of 2 nM.
RAGE229 directly competes with DIAPH1 for RAGE binding, antagonizes the RAGE-DIAPH1 complex in a dose-dependent manner.
RAGE229 inhibits CML-AGE stimulated cultured smooth muscle cells (SMCs) migration with IC50 of 26 nM, shows no effect on PDGFBB-stimulated SMC migration.
RAGE229 also shows IC50 of 120 nM for inhibition of human SMC migration in primary human aortic SMCs.
RAGE229 assuaged short- and long-term complications of diabetes in both male and female mice, without lowering blood glucose concentrations.
RAGE229 reduced plasma concentrations of TNF-α, IL-6, and CCL2/JE-MCP1 in diabetic mice, in parallel with reduced pathological and functional indices of diabetes-like kidney disease in type 1–like diabetic C57BL/6J mice.

References

Michaele B Manigrasso, et al. ***Sci Transl Med.*** 2021 Nov 24;13(621):eabf7084.

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