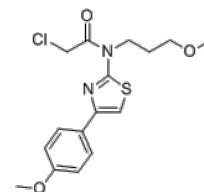


Product Name : JT010
Cat. No. : PC-49684
CAS No. : 917562-33-5
Molecular Formula : C₁₆H₁₉ClN₂O₃S
Molecular Weight : 354.85
Target : TRP Channel
Solubility : 10 mM in DMSO



Biological Activity

JT010 (JT-010) is a potent, site-selective and covalent TRPA1 agonist, opens the TRPA1 channel by covalently and site-selectively binding to Cys621 with EC₅₀ of 0.65 nM.

JT010 is highly selective for TRPA1 over TRPV1, TRPV3, TRPV4, TRPM2, TRPM8, and TRPC5 (EC₅₀ values >1 μM).

JT010 (10 nM) failed to stimulate calcium influx in the C621S mutant cells but induced calcium influx in the wild type cells.

JT010 could induce TRPA1-specific pain model. increased the intracellular calcium concentration and extracellular signal-regulated kinase 1/2 phosphorylation, and up-regulated alkaline phosphatase mRNA in human dental pulp cells.

Topical treatment of TRPA1 specific agonist JT010 increased UVB-induced skin pigmentation in guinea pigs.

References

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Wu W, et al. Exp Dermatol. 2022 Oct 27. doi: 10.1111/exd.14693.

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

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