

Product Data Sheet

AB21

 Cat. No.:
 HY-149854

 CAS No.:
 3026677-23-3

 Molecular Formula:
 C₂₃H₂₈N₂O

 Molecular Weight:
 348.48

Target: Sigma Receptor

Pathway: Neuronal Signaling

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	AB21 is a potent and selective S1R antagonist with K _i s of 13, 102 nM for S1R and S2R. AB21 has the effect of reducing mechanical hypersensitivity ^[1] .	
IC ₅₀ & Target	Sigma 1 Receptor 13 nM (Ki)	Sigma 2 Receptor 102 nM (Ki)
In Vitro	AB21 shows K _i s of 12 nM and 14 nM with or without Phenytoin in the S1R Radioligand Binding Assay ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
In Vivo	AB21 (20 mg/kg, s.c., administered 30 min before the injection of Capsaicin (HY-10448)) reverses mechanical allodyniain in Capsaicin (HY-B0448)-induced pain model, and exhibits higher potency than BD1063 dhydrochloride (HY-18101A) ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	
	Animal Model:	Capsaicin-induced mechanical hypersensitivity model in $mice^{[1]}$
	Dosage:	20 mg/kg
	Administration:	Subcutaneous injection (s.c.); administered 30 min before the injection of capsaicin
	Result:	Result: Showed complete reversal of the mechanical hypersensitivity reaction and the dose administered was half that of BD-1063 (40 mg/kg).

REFERENCES

[1]. Dichiara M, et al. Synthesis, Computational Insights, and Evaluation of Novel Sigma Receptors Ligands. ACS Chem Neurosci. 2023 May 17;14(10):1845-1858.

 $\label{lem:caution:Product} \textbf{Caution: Product has not been fully validated for medical applications. For research use only.}$

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