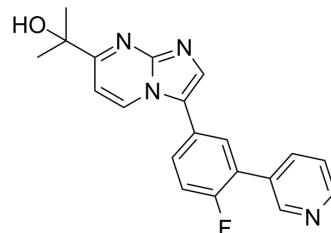


MRK-623

Cat. No.:	HY-123840
CAS No.:	461449-78-5
Molecular Formula:	C ₂₀ H ₁₇ FN ₄ O
Molecular Weight:	348.37
Target:	GABA Receptor
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	MRK-623 (Compound 14k) is an orally active, high-affinity GABA _A receptor agonist, with the K _i values of 0.85 nM, 3.7 nM, 4.0 nM, and 0.53 nM for α1, α2, α3, and α5, respectively. MRK-623 shows anxiolytic effect ^[1] .								
In Vitro	MRK-623 shows efficacy at human GABAA receptor subtypes expressed in L(tk ⁻) cells measured by whole cell patch-clamp electrophysiology ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
In Vivo	MRK-623 (oral gavage; 0.3, 1, and 3 mg/kg; once) shows anxiolytic effects in the rat elevated plus maze assay ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.								
	<table border="1"> <tr> <td>Animal Model:</td> <td>Rat</td> </tr> <tr> <td>Dosage:</td> <td>0.3, 1, and 3 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Oral gavage; 0.3, 1, and 3 mg/kg; once</td> </tr> <tr> <td>Result:</td> <td>Showed 78% BZ site occupancy at 3 mg/kg, with an ID₅₀ of 0.8 mg/kg.</td> </tr> </table>	Animal Model:	Rat	Dosage:	0.3, 1, and 3 mg/kg	Administration:	Oral gavage; 0.3, 1, and 3 mg/kg; once	Result:	Showed 78% BZ site occupancy at 3 mg/kg, with an ID ₅₀ of 0.8 mg/kg.
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REFERENCES

[1]. Simon C Goodacre, et al. Imidazo[1,2-a]pyrimidines as functionally selective and orally bioavailable GABA(A)alpha2/alpha3 binding site agonists for the treatment of anxiety disorders. J Med Chem. 2006 Jan 12;49(1):35-8.

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

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