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Product Data Sheet

Solifenacin-d₇ hydrochloride

Cat. No.:	HY-10230S	
Molecular Formula:	C ₂₃ H ₂₀ D ₇ ClN ₂ O ₂	
Molecular Weight:	405.97	
Target:	mAChR; Isotope-Labeled Compounds	
Pathway:	GPCR/G Protein; Neuronal Signaling; Others	
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.	НСІ

BIOLOGICAL ACTIVITY				
Description	Solifenacin-d ₇ (hydrochloride) is the deuterium labeled Solifenacin hydrochloride. Solifenacin hydrochloride (YM905 hydrochloride) is a muscarinic receptor antagonist, with pKis of 7.6, 6.9 and 8.0 for M1, M2 and M3 receptors, respectively.			
IC ₅₀ & Target	mAChR2	mAChR1	mAChR3	
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.			

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

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[3]. Krishna SR, Rao BM, Rao NS.A validated rapid stability-indicating method for the determination of related substances in solifenacin succinate by ultra-fast liquid chromatography.J Chromatogr Sci. 2010 Nov;48(10):807-10.

[4]. Ohtake A, Sato S, Sasamata M, Miyata K.The forefront for novel therapeutic agents based on the pathophysiology of lower urinary tract dysfunction: ameliorative effect of solifenacin succinate (Vesicare), a bladder-selective antimuscarinic agent, on overactive bladder symptoms, especially urgency episodes. J Pharmacol Sci. 2010;112(2):135-41. Epub 2010 Feb 4.

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

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