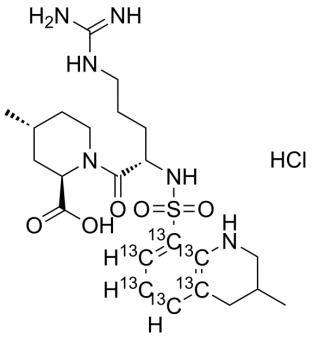
Argatroban-$^{13}C_6$ hydrochloride

Cat. No.:	HY-B0375S1
Molecular Formula:	$C_{17}{}^{13}C_6H_{37}ClN_6O_5S$
Molecular Weight:	551.05
Target:	Thrombin; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Argatroban-$^{13}C_6$ hydrochloride is ^{13}C labeled Argatroban (HY-B0375). Argatroban (MD-805) is a direct, selective thrombin inhibitor.
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]. Argatroban (MD-805) may have a complementary effect for preventing thrombus formation without aggravating bleeding tendency because of its monotarget specificity to thrombin. Administration (0.5 to 2 micrograms/kg/min) of Argatroban (MD-805) is a safe anticoagulant for left heart bypass in repairs of traumatic aortic rupture associated with multiple organ injuries[2]. Argatroban (MD-805), as compared with heparin, appears to enhance reperfusion with TPA in patients with AMI, particularly in those patients with delayed presentation. The incidences of major bleeding and adverse clinical outcome were lower in the patients receiving argatroban[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Kawada, T., et al., Argatroban, an attractive anticoagulant, for left heart bypass with centrifugal pump for repair of traumatic aortic rupture. Jpn J Thorac Cardiovasc Surg, 1999. 47(3): p. 104-9.

[2]. Jang, I.K., et al., A multicenter, randomized study of argatroban versus heparin as adjunct to tissue plasminogen activator (TPA) in acute myocardial infarction: myocardial infarction with novastan and TPA (MINT) study. J Am Coll Cardiol, 1999. 33(7): p. 1879-85.

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

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