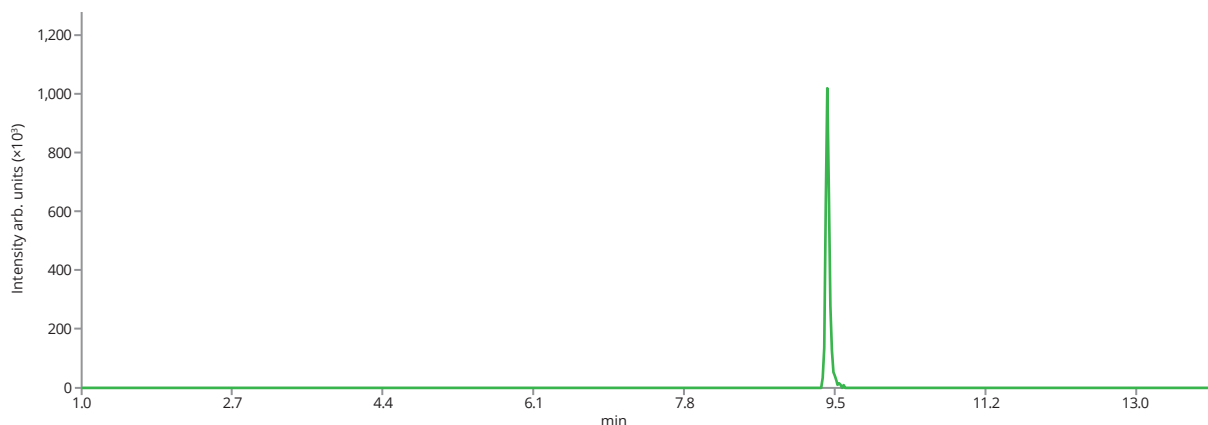
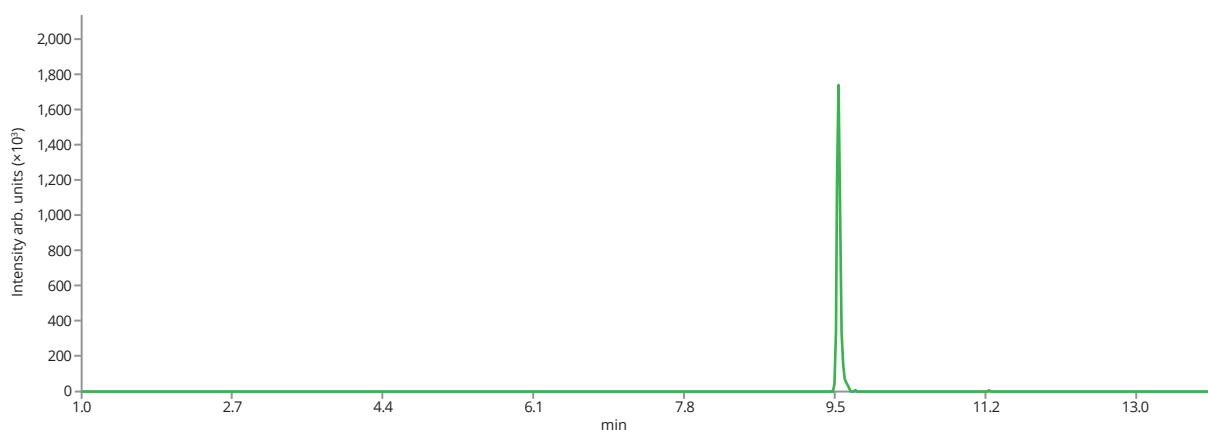


Antidiabetic drugs

Diabetes is a chronic condition that occurs when the body cannot produce any or enough insulin, or cannot effectively use the insulin it produces. Type 2 diabetes has attained the status of a global pandemic. Sulfonylureas represent a class of medications used in the treatment of type 2 diabetes mellitus. All sulfonylureas contain a phenyl-sulfonyl-urea structure, which exerts the hypoglycemic effect. An efficient and reliable LC/MS method has been developed for control of antidiabetic medications of sulfonylurea class glibenclamide and glimepiride.



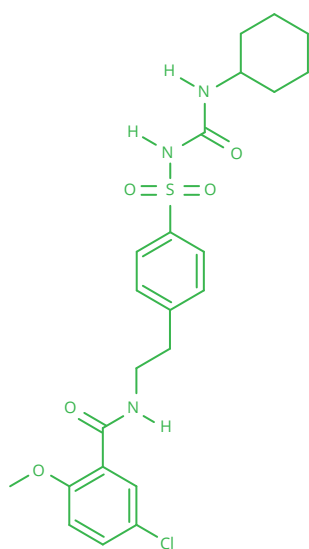
Glibenclamide RT: 9.43, m/z 494.1516



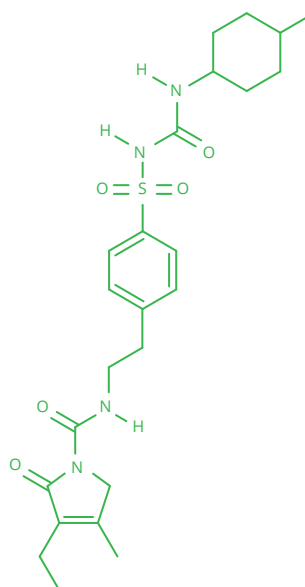
Glimepiride RT: 9.56, m/z 491.2328

Antidiabetic drugs

Column	ASTRA® C18-HE, 3 µm					
Dimensions	75 mm × 2.1 mm					
Part number	AST-5732-IH21					
Mobile phase	A: DDW + 0.1% Formic Acid B: ACN + 0.1% Formic Acid					
Gradient elution	Time	A (%)	B (%)	Time	A (%)	B (%)
	0	90	10	14	0	100
	1	90	10	14.01	90	10
	4	75	25	15	90	10
	8	60	40	17	90	1
	10	0	100			
Flow rate	0.35 mL/min					
Temperature	23 °C					
Detection	Full scan (resolving power 120 000, m/z 200), positive mode					
Injection volume	5 µL					
Analytes	1. Glibenclamide (glyburide) , CAS number 10238-21-8 2. Glimepiride , CAS number 261361-60-8					



Glibenclamide



Glimepiride