

Benzodiazepines are a group of psychoactive drugs with a broad range of therapeutic effects and belong to the most frequently prescribed drugs all over the world.

The ClinMass® Add-on Set for Benzodiazepines (order no. MS9550) contains all analyte specific components required for the quantification of 35 different drugs and metabolites.

The ClinMass® TDM Platform (order no. MS9050) contains the components needed for on-line SPE LC-MS/MS analysis. It can be used with all ClinMass® Add-on Sets of the "TDM Kit System, on-line" (BZP, TCA, ...). The analytical column is suitable for the whole analyte panel (103 compounds).

TDM Kit System, on-line

Benzodiazepines in Serum / Plasma

Test Data

Test data are available on request.

LC-MS/MS Parameters

LC-Parameters

Pump 1 (SPE): gradient program
(0.1 - 4 ml/min)

Pump 2 (Mobile Phase A, B):
gradient program
(0.6 ml/min)

Injection volume: 2 - 20 µl*

Injection interval: 7.5 min

Column heater: 40 °C

* depending on the sensitivity of the mass spectrometer

MS-Parameters

Ion source: ESI, positive

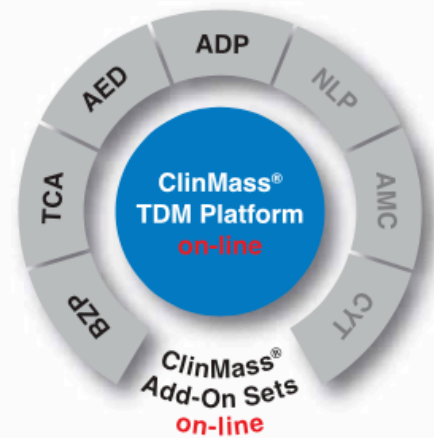
MS/MS mode: MRM

Sample Preparation

No manual sample preparation needed!

Direct injection of sample and Internal Standard IS in the ratio 1:1 (autosampler).

Fully automated on-line method!

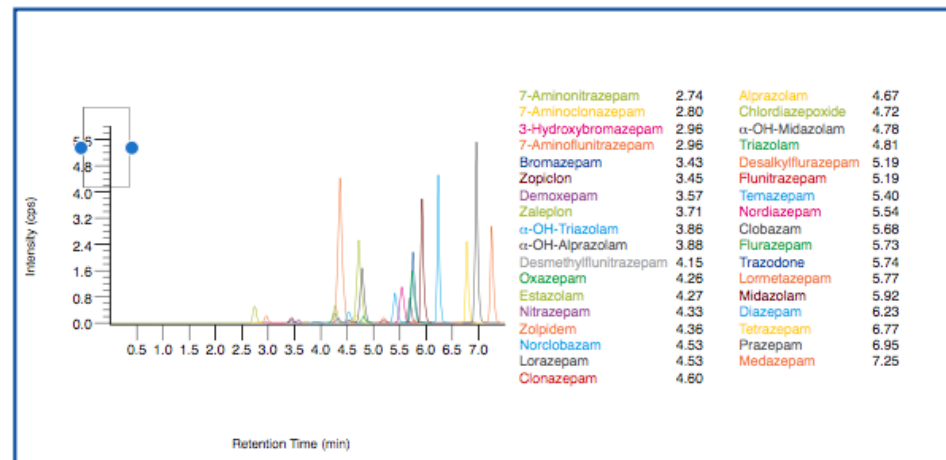


→ No manual sample preparation needed

→ Flexible and fast LC-MS/MS Analysis (7.5 min)

→ IS contains 20 isotope labeled analytes

Chromatogram of the ClinCal® Serum Calibrator, Level 2 (order no. MS6013)



Ordering Information

Order No.	Description	Quantity
MS9050	ClinMass® TDM Platform, on-line for 400 assays	1 pce.
Components (order no. MS9050):		
MS9005	Autosampler Washing Solution	1000 ml
MS9007	Mobile Phase A	2 x MS9007 (2 x 1000 ml)
MS9008	Mobile Phase B	1000 ml
MS9059	SPE-Buffer Load L	2 x MS9059 (2 x 2500 ml)
MS9060	SPE-Buffer Wash W	2 x MS9060 (2 x 2500 ml)
MS9071	Reconstitution Solution R	5 ml
Start Accessories:		
MS9035	Analytical Column with test chromatogram	1 pce.
MS9031	SPE-Column	1 pce.
MS9032	Pre-filter	1 pce.
Accessories:		
MS9022	Diluting Solution D	50 ml
FK7400	Inline-Filter (stainless steel sieve, free of dead volume)	1 pce.
FK7340	Sealings and sieves	4 pcs. each
MS9550	ClinMass® Add-on Set, on-line, for Benzodiazepines in Serum / Plasma for 400 assays	1 pce.
Components (order no. MS9550):		
MS9562	Internal Standard IS, lyophil.	5 ml
MS6013	Serum Calibrator Set, lyophil. (Level 0 - 3) Manual	4 x 1 x 1 ml 1 pce.
Start Accessories:		
MS6015 - MS6019	Optimisation Mix 1 - 5, lyophil.	2 ml each
ClinChek® Controls:		
MS6082	Serum Control, lyophil., Level I, II	2 x 5 x 1 ml