GABAPENTIN IN BLOOD, PLASMA/SERUM FOR GC OR GC/MS ANALYSIS USING: 100 mg CLEAN-UP® C18 EXTRACTION COLUMN

Part #: CUC18111

1. PREPARE SAMPLE

To 500 µL of 20% acetic acid add internal standard*. Mix/vortex. Add 500 µL of blood, plasma/ serum. Mix/ vortex.
Centrifuge as appriate

2. CONDITION COLUMN

1 x 3 mL CH_3OH.
1 x 3 mL D.I. H_2O.
1 x 1 mL 100 mM HCL.

NOTE: Aspirate at < 3 inches Hg to prevent sorbent drying.

3. APPLY SAMPLE

Load at 1 to mL/minute.

4. WASH COLUMN

1 x 3 mL D.I. H_2O.
1 x 3 mL ethyl acetate.
1 x 3 mL hexane.
Dry column (5 minutes at > 10 inches Hg) or until column is dry.

5. ELUTION

1 x 1 mL 2% NH_4OH in CH_3OH.

6. DRY ELUATE

Evaporate to dryness at < 40°C.

1. DERIVATIZATION

Add 50 µL of ethyl acetate and 50 µL of BSTFA (1 % TCMS)
or
Add 50 µL of MTBSTFA + 1 % t-BDMCS** and 50 µL ethyl acetate.
Cap and heat at 70°C for 30 minutes.
Remove and allow to cool.

8. QUANTITATE

Inject 1 to 2 µL onto gas chromatograph.

Compound	Primary	Secondary	Tertiary	Ceriliant #
Gabapentin-TMS	210	225	182	G-007
*Gabapentin-D10-TMS	220	235	192	B-130315-10

*** INTERNAL STANDARD:**

1-aminomethyl-1-cycloheptyl acetic acid (FID) : Gabapentin-D10 (GC-MS)
** Part # SMTBSTFA-1-1,10,25,100

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Reference:

Carl E. Wolf II, Joseph Sady, and Alphonse Pokalis Determination of Gabapentin in Serum using Solid Phase Extraction and Gas-Liquid Chromatography. Journal of Analytical Toxicology 20:498-501 (October 1996)

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