

**Overview****Method Name**

High Performance Liquid Chromatography/Tandem Mass Spectrometry (LC-MS/MS)

**NY State Available**

Yes

**Specimen****Specimen Type**

Serum Red

**Specimen Required****Specimen Type:** Serum**Container/Tube:** Red-top**Preferred:** Red-top**Specimen volume:** 1 mL

Draw blood in a plain red-top tube(s), serum gel tube is not acceptable. Spin down and send 1 mL of serum frozen in a plastic vial.

**Specimen Minimum Volume**

0.5 mL

**Reject Due To**

Hemolysis	Mild reject; Gross reject
Lipemia	Mild OK; Gross OK
Icterus	OK
Other	Polymer gel separation tube (SST or PST)

**Specimen Stability Information**

Specimen Type	Temperature	Time	Special Container
Serum Red	Frozen	30 days	

**Clinical and Interpretive****Reference Values**

Reporting Limit determined each analysis.

Units: ng/mL

**Interpretation**

Bupropion:

Maximum antidepressant response was observed at trough plasma concentrations of 50 – 100 ng/mL bupropion with virtually no response below 25 ng/mL.

Reported average bupropion peak plasma concentrations:

Adults: Single 100 mg IR – 120 +/- 10 ng/mL (Males):

150 +/- 10 ng/mL (Females)

Adults: Single 200 mg IR -220 +/- 20 ng/mL (Males):

270 +/- 20 ng/mL (Females)

Adults: Single 150 mg SR - 140 +/- 20 ng/mL

Juveniles: 100 mg/day SR for 2 weeks – 25 +/- 8 ng/mL

Juveniles: 200 mg/day SR for 2 weeks – 53 +/- 22 ng/mL

Specimens must be kept frozen. If specimens are not kept frozen, this may cause lower or negative values.

Hydroxybupropion:

8 adults (Age 22 – 42) taking thrice daily 100 mg normal release bupropion for 2 weeks had an average peak plasma concentration of 1000 +/- 70 ng/mL hydroxybupropion.

Juvenile patients taking once daily, extended release bupropion for two weeks had the following peak plasma concentrations:

100 mg/day (n = 11), 450 +/- 210 ng/mL hydroxybupropion

200 mg/day (n = 8), 710 +/- 350 ng/mL hydroxybupropion

**Performance****PDF Report**

No

**Day(s) and Time(s) Test Performed**

Monday through Sunday

**Analytic Time**

4 days

**Maximum Laboratory Time**

6 - 10 days

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**Performing Laboratory Location**

NMS Labs

**Fees and Codes****Fees**

- Authorized users can sign in to [Test Prices](#) for detailed fee information.
- Clients without access to Test Prices can contact [Customer Service](#) 24 hours a day, seven days a week.
- Prospective clients should contact their Regional Manager. For assistance, contact [Customer Service](#).

**Test Classification**

This test was developed and its performance characteristics determined by NMS Labs. It has not been cleared or approved by the U.S. Food and Drug Administration.

**CPT Code Information**

80338

**LOINC® Information**

Test ID	Test Order Name	Order LOINC Value
FBUMT	Bupropion and Metabolite, S	Not Provided

Result ID	Test Result Name	Result LOINC Value
Z3522	Bupropion	6706-6
Z3523	Hydroxybupropion	9418-5