



# Test Definition: FNTSM

Neurotransmitter Profile 3

## Overview

## Profile Information

Test Id	Reporting Name	Available Separately	Always Performed
F5MET	5-Methyltetrahydrofolate	Yes, (order F5M)	Yes
FNTM	Neurotransmitter Metabolites/Amines	Yes, (order FNEU)	Yes
FFTHB	Tetrahydrobiopterin/Neopterin	Yes, (order FFTEN)	Yes

## Method Name

High Performance Liquid Chromatography-Electrochemistry & Fluorescences

## NY State Available

Yes

## Specimen

### Specimen Type

CSF

### Specimen Required

Medical Neurogenetics collection kit (MCL Supply T657) required.

Each collection kit contains 5 microcentrifuge tubes.

#### COLLECTION PROTOCOL:

1) CSF should be collected from the first drop into the tubes in the numbered order. Fill each tube to the marked line with the required volumes.

Tube 1: 0.5 mL

Tube 2: 1.0 mL

Tube 3: 1.0 mL (contains antioxidants necessary to protect the same integrity)

Tube 4: 1.0 mL

Tube 5: 1.0 mL

-If samples not blood contaminated, the tubes should be placed on dry ice at bedside.

-If samples are blood contaminated, the tubes should immediately be centrifuged (prior to freezing) and the clear CSF transferred to new similarly labeled tubes, then frozen.

-Store samples at -80 until they can be shipped.

2) Complete Medical Neurogenetics, LLC request form, marking the following three tests: Neurotransmitter Metabolites, Tetrahydrobiopterin and 5-Methyltetrahydrofolate. Also include sample date and date of birth.

3) Label tubes with patient name and ID number, leaving the tube number viewable.

4) Place samples inside the specimen transport bag and the Medical Neurogenetics, LLC request form inside the pouch of the transport bag.

5) Ship samples frozen on dry ice.

### Reject Due To

Specimens other than	CSF in special collection kit (MCL supply T657)
Anticoagulants other than	NA
Hemolysis	NA
Lipemia	NA
Icteric	NA

### Specimen Stability Information

Specimen Type	Temperature	Time	Special Container
CSF	Frozen		CSF KIT

### Clinical & Interpretive

#### Reference Values

##### 5-Methyltetrahydrofolate

Age (years)	5MTHF (nmol/L)
0-0.2	40-240
0.2-0.5	40-240
0.5-2.0	40-187
2.0-5.0	40-150
10-15	40-128
Adults	40-120

##### Neurotransmitter Metabolites/Amines

Age (years)	5HIAA (nmol/L)	HVA (nmol/L)	3-O-MD (nmol/L)
0-0.2	208-1159	337-1299	<300
0.2-0.5	179-711	450-1132	<300
0.5-2.0	129-520	294-1115	<300

2.0-5.0	74-345	233-928	<150
5.0-10	66-338	218-852	<100
10-15	67-189	167-563	<100
Adults	67-140	145-324	<100

**Neurotransmitter Metabolites/Amines**

<u>Age (years)</u>	<u>5HIAA (nmol/L)</u>	<u>HVA (nmol/L)</u>	<u>3-O-MD (nmol/L)</u>
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Adults	67-140	145-324	<100

**Tetrahydrobiopterin/Neopterin Profile**

<u>Age (years)</u>	<u>BH4 (nmol/L)</u>	<u>Neop (nmol/L)</u>
0-0.2	40-105	7-65
0.2-0.5	23-98	7-65
0.5-2.0	18-58	7-65
2.0-5.0	18-50	7-65
5.0-10	9-40	7-40
10-15	9-32	8-33
Adults	10-30	8-28

Note: If test results are inconsistent with the clinical presentation, please call our laboratory to discuss the case and/or submit a second sample for confirmatory testing.

DISCLAIMER required by the FDA for high complexity clinical laboratories: HPLC testing was developed and its performance characteristics determined by Medical Neurogenetics. These HPLC tests have not been cleared or approved by the U.S. FDA.

**Performance**
**PDF Report**

Referral

**Day(s) Performed**

Monday through Friday

**Report Available**

14 to 18 days

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**Performing Laboratory Location**

Medical Neurogenetics, LLC

**Fees & 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 account representative. For assistance, contact [Customer Service](#).

**CPT Code Information**

82542 x3

83497

83150

**LOINC® Information**

Test ID	Test Order Name	Order LOINC® Value
FNTSM	Neurotransmitter Profile 3	Not Provided

Result ID	Test Result Name	Result LOINC® Value
Z1726	5-Methyltetrahydrofolate	47547-5
Z1730	Neopterin	34146-1
Z1731	Tetrahydrobiopterin	Not Provided
Z1732	Interpretation	Not Provided
Z1727	5-Hydroxyindoleacetic acid	47544-2
Z1728	Homovanillic acid	40846-8
Z1729	3-O-methyldopa	34596-7