

Reporting Title: Tetrahydrobiopterin/Neopterin

Performing Location: Medical Neurogenetics, LLC

Specimen Requirements:

Medical Neurogenetics collection kit (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 sample integrity)

Tube 4: 1.0 mL

Tube 5: 1.0 mL

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If sample's not blood contaminated, the tubes should be placed on dry ice at bedside

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

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Store samples at -80 until they can be shipped
- 2)

Complete Medical Neurogenetics, LLC request form. Include test required, sample date and date of birth.
- 3)

Label tubes with patient name and ID number, leaving the tube number viewable.
- 4)

Place samples inside a specimen transport bag and the Medical Neurogenetics, LLC request form inside the pouch of the transport bag.
- 5)

Ship samples frozen on dry ice.

Specimen Type	Temperature	Time	Special Container
CSF	Frozen		CSF KIT

Result Codes:

Result ID	Reporting Name	Type	Unit	LOINC®
Z2234	Neopterin	Alphanumeric	nmol/L	34146-1
Z2235	Tetrahydrobiopterin	Alphanumeric	nmol/L	Not Provided
Z2236	Interpretation	Alphanumeric		59462-2

LOINC® and CPT codes are provided by the performing laboratory.

Supplemental Report:

Referral

CPT Code Information:

82542

Reference Values:

Tetrahydrobiopterin/Neopterin Profile

Age (years)	BH4 (nmol/L)	Neop (nmol/L)
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 consistent with the clinical presentation, please call our laboratory to discuss the case and/or submit a second sample for confirmatory testing.

An important consideration for false positive for false negative results is the improper labeling of the patient sample.