Information Required for Requisition and Sample Labeling:
Be sure the samples are labeled properly with the patient(s) name(s) and your facility ID number. Please include: tests required, sample date, date of birth, current medications and relevant medical history. Be sure to complete your billing information on our site at www.mnglabs.com/forms. Failure to provide this information may result in delayed processing of test.

The following instructions apply for the listed CSF Testing for samples NOT collected with MNG CSF collection kit:

**• NC01** 5 Methyltetrahydrofolate  
**• NC02** Neopterin  
**• NC03** Tetrahydrobiopterin and Neopterin  
**• NC04** Neurotransmitter Metabolites (5HIAA, HVA, 3OMD)  
**• NC05** Pyridoxal 5-phosphate  
**• NC06** Succinyladenosine  
**• NC07** Sialic Acid  
**• NC08** Alpha-aminoadipic Semialdehyde  
**• NC10** CSF Glucose  
**• MET01** CSF Amino Acids  
**• MET07** CSF Lactate

Request a CSF Collection Kit online at www.mnglabs.com/kits

Tube #3 contains antioxidants necessary to protect the sample from oxidation. One set of tubes is required per patient. The total CSF volume required is 4.5 milliliters.

With MNG CSF Collection Kit:
CSF should be collected directly from the tap needle: collect from the first drop into the containers in the order indicated:

1. Fill each tube sequentially to the marked line (0.5 milliliters in tube #1 and 1.0 milliliter in tube 2, 3, 4 & 5).
2. Attach patient identifiers to each tube without covering the tube number.
3. If there is no blood contamination, place the tubes into a biohazard bag and place on ice (or dry ice if available) at bedside. Transfer the samples to a -80°C freezer ASAP. Ship on dry ice.

If the sample is blood contaminated:
1. Centrifuge the tubes prior to freezing.
2. Transfer the clear supernatant into new numbered (1-5) tubes.
3. Freeze and store at -80°C ASAP.

Without MNG CSF Collection Kit:
If you do not have an MNG Laboratories supplied CSF Collection Kit containing 5 labeled microcentrifuge tubes:

1. Collect samples into 5 numbered 2.0 mL microcentrifuge tubes (or similar):
   - Obtain 5 microcentrifuge tubes or similar and label 1-5.
   - Follow the instructions above for filling tubes.

OR

2. Collect entire sample into a single sterile tube, e.g. is considered a pooled CSF sample. Neurotransmitter analysis may only be informative for certain disorders (NC04 analysis).

For the collections above that are not collected into MNG Laboratories supplied CSF collection kits, NC03 analysis is unable to be performed due to lack of antioxidants found in our kit. Please order NC02 analysis. Please contact the laboratory for more information.

To submit a sample for CSF Pyruvate Analysis (MET11), collect CSF into a single tube (not provided with CSF Collection Kit):

1. Add 1 mL of CSF to 2 mL of COLD 6-8% perchloric acid.
2. Freeze immediately at -80°C and ship on dry ice.