Encephalopathy Autoimmune Evaluation Algorithm - Spinal Fluid

The following tests are always performed:

- Glutamic acid decarboxylase (GAD65) antibody assay
- Antineuronal nuclear antibody-type 1 (ANNA-1)
- Antineuronal nuclear antibody-type 2 (ANNA-2)
- Antineuronal nuclear antibody-type 3 (ANNA-3)
- Purkinje cell cytoplasmic antibody, type 1 (PCA-1)
- Purkinje cell cytoplasmic antibody, type 2 (PCA-2)
- Purkinje cell cytoplasmic antibody, type Tr (PCA-Tr)
- Amphiphysin antibody assay
- Collapsin response-mediator protein-5 neuronal (CRMP-5-IgG)
- Anti-glial/neuronal nuclear antibody-type 1 (AGNA-1)
- Dipeptidyl-peptidase-like protein-6 (DPPX) antibody
- Metabotropic glutamate receptor 1 (mGluR1) antibody
- Glial fibrillary acidic protein (GFAP) alpha subunit antibody
- NMDA-receptor antibody
- AMPA-receptor antibody
- GABA-B-receptor antibody
- Contactin-associated protein-like-2 (CASPR2)-IgG
- Leucine-rich glioma inactivated protein-1 (LRG1-IgG)

If IFA pattern suggests ANNA-1, ANNA-2, PCA-1, PCA-2, amphiphysin antibody, or CRMP-5 IgG or if IFA pattern is indeterminate:

- CRMP-5-IgG Western blot
- DPPX antibody by CBA
- DPPX antibody by IF titer assay
- Amphiphysin antibody Western blot
- GFAP alpha subunit antibody by CBA
- GFAP alpha subunit antibody by IF titer assay
- mGluR1 antibody by CBA
- mGluR1 antibody by IF titer assay
- AMPA-receptor antibody IF titer assay
- NMDA-receptor antibody IF titer assay
- GABA-B-receptor antibody IF titer assay

If IFA pattern suggests GFAP antibody:

- GFAP alpha subunit antibody by CBA
- GFAP alpha subunit antibody by IF titer assay

If IFA pattern suggests DPPX antibody:

- DPPX antibody by CBA
- DPPX antibody by IF titer assay

If IFA pattern suggests amphiphysin antibody:

- Amphiphysin antibody by CBA
- Amphiphysin antibody by IF titer assay

If IFA pattern suggests mGluR1 antibody:

- mGluR1 antibody by CBA
- mGluR1 antibody by IF titer assay

If IFA pattern suggests mGluR1 antibody and AMPA-receptor antibody and NMDA-receptor antibody, CBA are positive:

- AMPA-receptor antibody IF titer assay
- NMDA-receptor antibody IF titer assay
- GABA-B-receptor antibody IF titer assay

If pattern suggests AMPA-receptor antibody and NMDA-receptor antibody, CBA are positive:

- AMPA-receptor antibody IF titer assay
- NMDA-receptor antibody IF titer assay
- GABA-B-receptor antibody IF titer assay

If pattern suggests GABA-B-receptor antibody and GABA-B-receptor antibody, CBA are positive:

- AMPA-receptor antibody IF titer assay
- NMDA-receptor antibody IF titer assay
- GABA-B-receptor antibody IF titer assay

If IFA pattern suggests CRMP-5 IgG:

- CRMP-5-IgG Western blot
- CRMP-5-IgG by CBA
- CRMP-5-IgG by IF titer assay

Paraneoplastic autoantibody, Western blot confirmation:

- CRMP-5-IgG Western blot
- CRMP-5-IgG by CBA
- CRMP-5-IgG by IF titer assay