Encephalopathy Autoimmune Evaluation Algorithm - Spinal Fluid

**ENC1 / Encephalopathy, Autoimmune Evaluation, Spinal Fluid**

The following tests are always performed:

- **Radioimmunoprecipitation Assay (RIA)**
  - Glutamic Acid Decarboxylase (GAD65) Antibody Assay, Spinal Fluid
  - Neuronal Voltage-Gated Potassium Channel-Complex (VGKC) Autoantibody, Spinal Fluid

- **Immunofluorescence Assay (tissue IFA)**
  - Antineuronal Nuclear Antibody-Type 1 (ANNA-1), Spinal Fluid
  - Antineuronal Nuclear Antibody-Type 2 (ANNA-2), Spinal Fluid
  - Antineuronal Nuclear Antibody-Type 3 (ANNA-3), Spinal Fluid
  - Purkinje Cell Cytoplasmic Antibody, Type 1 (PCA-1), Spinal Fluid
  - Purkinje Cell Cytoplasmic Antibody, Type 2 (PCA-2), Spinal Fluid
  - Purkinje Cell Cytoplasmic Antibody, Type Tr (PCA-Tr), Spinal Fluid
  - Amphiphysin Antibody Assay, Spinal Fluid
  - Collapsin Response-Mediator Protein-5 Neuronal (CRMP-5-IgG), Spinal Fluid
  - Anti-Glial / Neuronal Nuclear Antibody-Type 1 (AGNA-1), Spinal Fluid
  - Dipeptidylpeptidase-Like Protein-6 (DPPX) Antibody by Immunofluorescence, Spinal Fluid
  - Metabotropic Glutamate Receptor 1 (mGluR1) Antibody by Immunofluorescence, Spinal Fluid

- **Immunofluorescence Assay (cell binding; CBA)**
  - NMDA-Receptor Antibody by CBA, Spinal Fluid
  - AMPA-Receptor Antibody by CBA, Spinal Fluid
  - GABA-B-Receptor Antibody by CBA, Spinal Fluid
  - Contactin-Associated Protein-Like-2 (CASPR2)-IgG, Spinal Fluid
  - Leucine-Rich Glioma Inactivated Protein-1 IgG, Spinal Fluid

If IFA pattern suggests:
- ANNA-1, ANNA-2, PCA-1, PCA-2, amphiphysin antibody, or CRMP-5 IgG or if IFA pattern is indeterminate
- NMO/aquaporin-4-IgG
- DPPX antibody
- mGluR1 antibody
- AMPA-receptor antibody and AMPA-receptor antibody, CBA are positive
- NMDA-receptor antibody and NMDA-receptor antibody, CBA are positive
- GABA-B-receptor antibody and GABA-B-receptor antibody, CBA are positive

**Paraneoplastic autoantibody, Western blot confirmation**

- Collapsin response-mediator protein-5-IgG (CRMP-5-IgG) Western blot
- Dipeptidyl-peptidase-like protein-6 (DPPX) antibody by cell binding assay
- Dipeptidyl-peptidase-like protein-6 (DPPX) antibody by immunofluorescence titer assay
- Amphiphysin antibody Western blot
- Neurophilis optica (NMO)/aquaporin-4-IgG fluorescence-activated cell sorting (FACS) assay
- Metabotropic glutamate receptor 1 (mGluR1) antibody by immunofluorescence titer assay
- AMPA-receptor antibody IF titer assay
- NMDA-receptor antibody IF titer assay
- GABA-B-receptor antibody IF titer assay