References:


The ravo blot for the detection of the well characterized autoantibodies anti-HuD, anti-Yo, anti-Ri, anti-CV2/CRMP5, anti-Amphiphysin, anti-Ma1, anti-Ma2, anti-SOX1 and anti-GAD65 has been improved by the addition of Tr- (DNER-) and Zic4. Although both autoantibodies are very rarely detected they play an important role to confine a paraneoplastic etiology in so far unexplained neurological diseases.

**Tr (DNER):** Autoantibodies to the so-called Tr antigen associated with Hodgkin Lymphoma are known as marker for a paraneoplastic subacute cerebellar degeneration. So far these autoantibodies have been identified by IFA by their typical staining pattern of Purkinje cells. Recently it has been shown that DNER (Delta/Notch-like Epidermal Growth Factor-Related Receptor) is the underlying Tr antigen (1).

**Zic4:** Autoantibodies to Zic4 are associated with paraneoplastic cerebellar degeneration and the underlying tumor is often a small cell lung cancer. Antibodies to HuD and CV2 (CRMP5) and to lesser extent to Ri are also detected in patients with paraneoplastic disorders and antibodies to Zic4. The frequency of Zic4 antibodies in SCLC without paraneoplastic disorders is 16% (2).

**Advantages of the new PNS 11 Line Assay:**

- Detection of 11 important neurological autoantibodies on one strip using one serum dilution
- Serum sample dilution 1:200
- Sample incubation reduced to 30 minutes