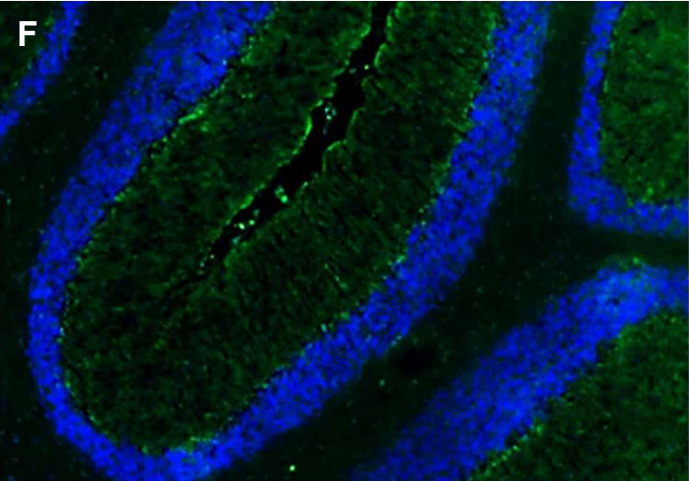
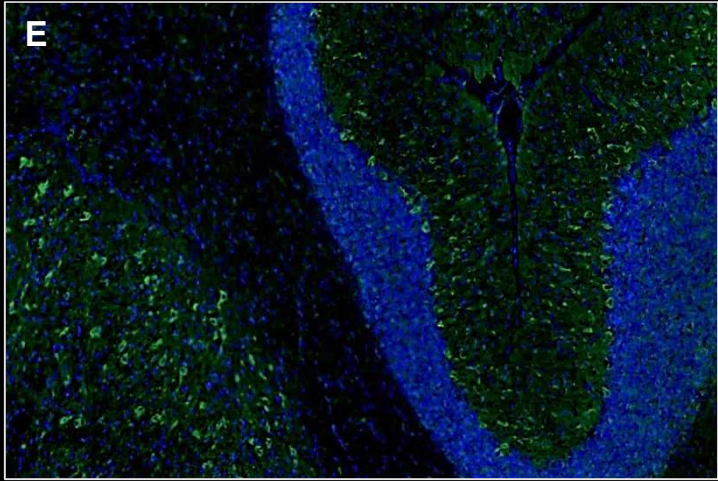
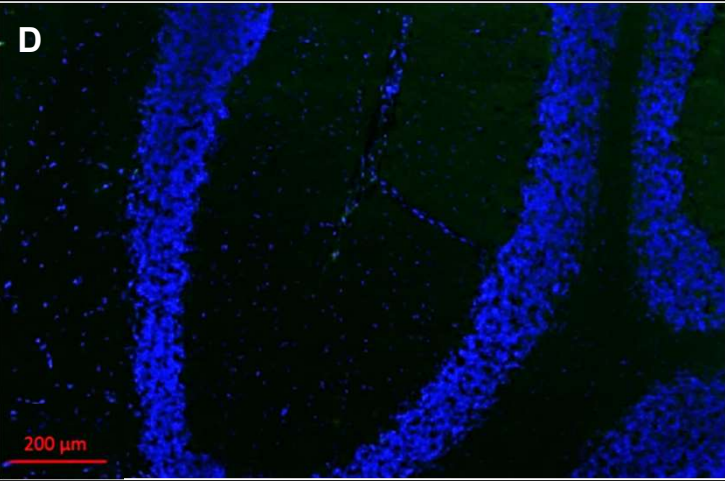
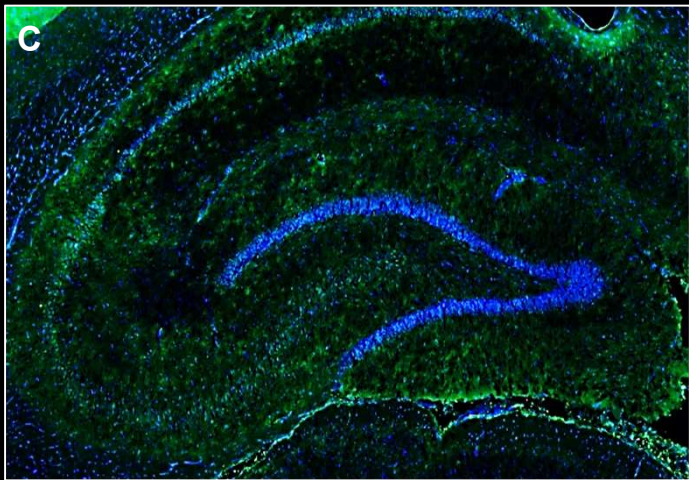
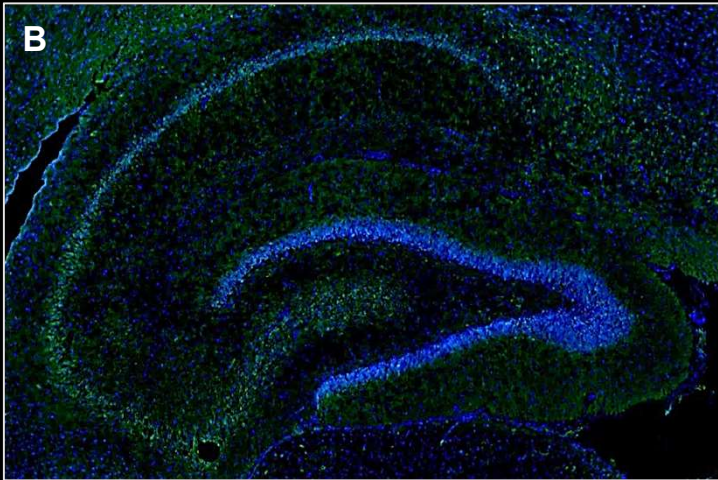
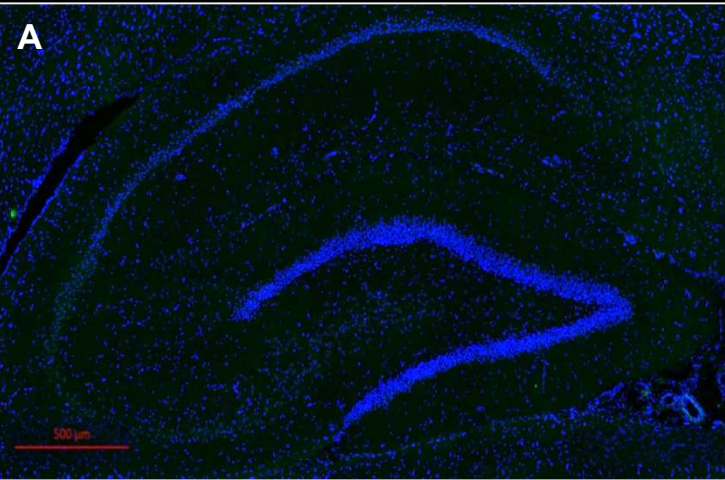


Control CSF

Patient #1

Patient #7



e-Figure 1. Indirect immunofluorescence on hippocampal and cerebellar rodent brain sections incubated with control CSF (panel A, D), with the CSF of patient #1 (panel B,E), and with the CSF of patient #7 (panel C,F).

Incubation with control CSF (panel A,D) showed no immunofluorescence from the secondary antibody on hippocampal (panel A) and cerebellar (panel D) sections (blue =DAPI; green= Alexa488 Human anti-IgG).

Incubation with the CSF of patient #1 (panel B,E) showed a staining of the neurons of Cornu Ammonis of the hippocampus (panel B), and of Purkinje cells, granular and molecular layer cells in the cerebellum (panel E), compatible with the presence of an atypical autoantibody targeting an intracellular antigen. The CSF of patient #1 tested negative on commercial line immunoblot assays (Euroimmun, Lubek, Germany) for known autoantibodies to intracellular neuronal antigens and for anti-nuclear antibodies.

Incubation with the CSF of patient #7 (panel C, F) showed a patchy diffuse staining of the hippocampus (panel C), and a faint diffuse staining of the molecular layer of the cerebellum (panel F), compatible with the presence of an atypical anti-neuropil antibody. The CSF of patient #7 tested negative for known cell-surface antibodies on commercial cell-based assays (Euroimmun, Lubek, Germany) and for known autoantibodies to intracellular neuronal antigens by line immunoblot assays (Euroimmun, Lubek, Germany).