For the antigens purity analysis, all proteins were separated on SDS-PAGE. As shown on **Figure 1** the purity of all the proteins was more than 95% and the molecular weight was in accordance with the theoretical molecular mass for each antigen.

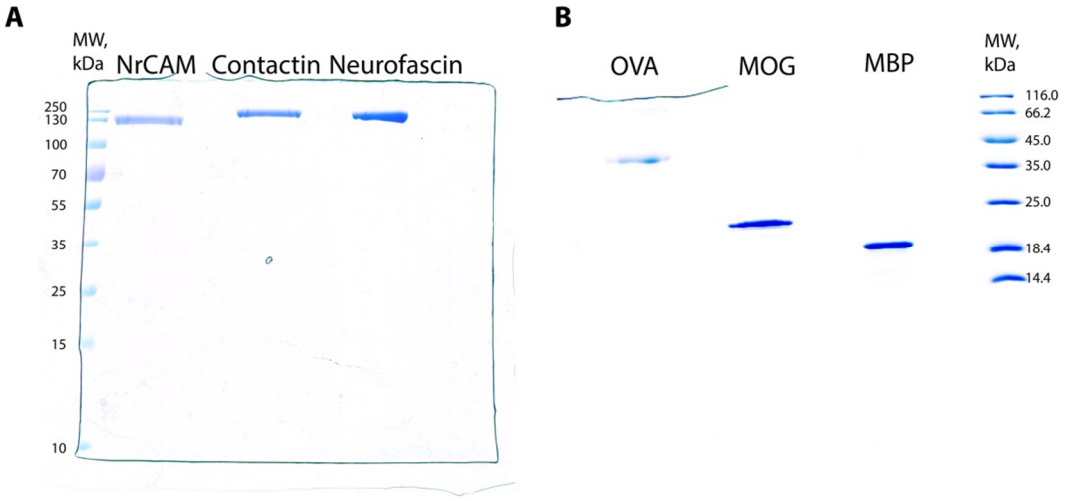

Figure 1. Purity of tested antigens. **A** NrCAM, Contactin and Neurofascin separation on 15% SDS-PAGE. **B** MBP, MOG and OVA separation on 12.5% SDS-PAGE. Purity ≥ 95%.

To test the antigens binding on polystyrene MaxiSorp 96-well plates,ELISA with specific antibodies as positive controls was carried out. As shown on **Figure 2** MBP, MOG, NrCAM and Contactin were detected by their specific antibodies. Additionally recombinant proteins - MOG, Contactin and Neurofascin were detected by a-His antibodies as these proteins had a His-tag.

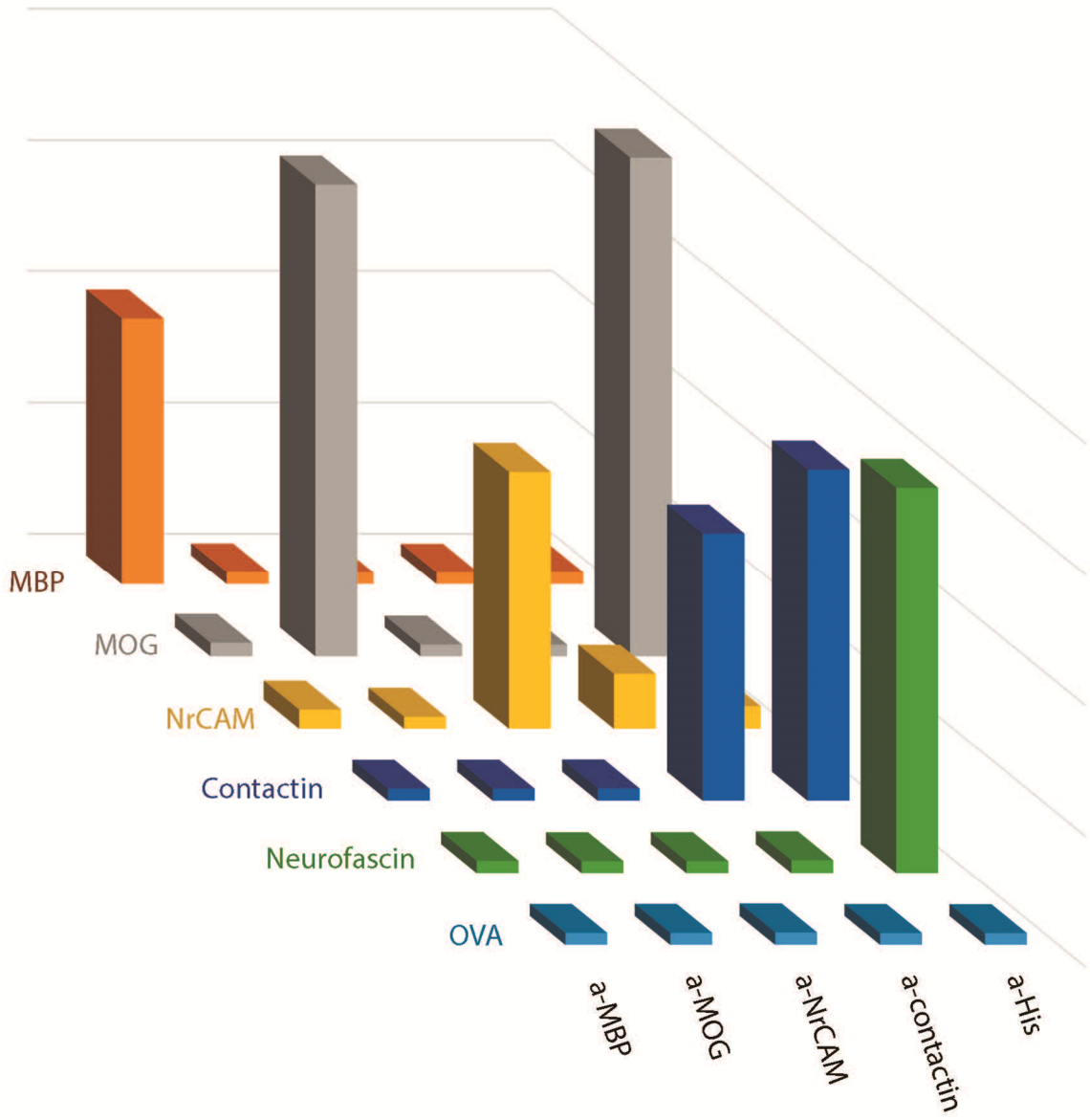

Figure 2. Antigens quality proved by ELISA. MBP colored in orange, MOG – grey, NrCAM – yellow, Contactin – dark blue, Neurofascin – green, OVA – light blue. Specific antibodies are written in black.

As Human/Mouse/Rat Neurofascin Antibody (AF3235. **R&D Systems Inc., USA**) is not suitable for detection of human Neurofascin in a direct ELISA (according to manufacturer's recommendation), we performed Western Blot analysis with a-Neurofascin Antibody. As shown on **Figure 3** molecular weight of a protein detected by a-Neurofascin antibodieswas in accordance with the theoretical molecular mass of human Neurofascin.

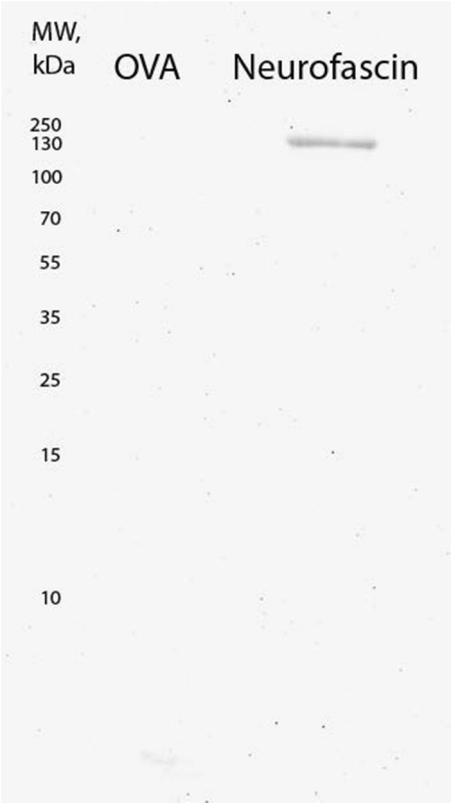

Figure 3. Western-blot analysis of human Neurofascin by human Neurofascin antibody. Ovalbumin (OVA) was used as a negative control.