

## Supplementary figure 5: Human a-synuclein or BSA staining in the olfactory bulb 1.5 h and 3 h after protein injection into the olfactory bulb.

Low magnification images of the ipsilateral OB (Mit/GL) (scale bar = 50  $\mu$ m) or high magnification images (scale bar = 10  $\mu$ m) of glomerular layer (GL), mitral layer (Mit), and granular cell layer (GCL) of the ipsilateral OB. **a.** At 1.5 h after injection of monomeric, oligomeric and fibrillar ta-syn, we observed hua-syn-positive cells in various layers of the OB, namely GL, Mit, and GCL. By contrast, no BSA-positive cell was found in the OB injected with tBSA. **b.** At 3 h after injection of monomeric, oligomeric and fibrillar ta-syn, we found hua-syn-positive cells still present in the GL, Mit, and GCL of the OB. By contrast, 3 h after injection of tBSA no BSA-positive cell was found in OB. As a control, we injected OB with ATTO-550 and stained with the syn211 antibody. In these mice we did not find any hua-syn-positive signal.