

SUPPLEMENT

Supplemental Fig. 1. Anti-Synuclein Antibodies and Bovine α - and β -Synuclein

Sequences. The rabbit “monoclonal” antibody (Abcam 138501) recognizes only α -synuclein (the corresponding sequence in β -synuclein is completely different). The antibody was made against a peptide (aa 118-123 VDPDNE, in blue) in human α -synuclein (identical to bovine sequence). The rabbit antibody (Abcam 15532) recognizes β -synuclein only (epitope near C-terminus, not depicted). The mouse monoclonal antibody (DSHB H3C) recognizes both α -synuclein and β -synuclein. It probably sees the very C-terminal amino acids. The antibody was generated against a peptide (aa 126-140 EMPPEEEYQDYEPEA in green) in canary α -synuclein (shown above bovine sequences in green). Differences in bovine α - and β -synuclein sequences are highlighted in yellow.

Suppl. Fig. 2. α -Synuclein is variably expressed in chromaffin cells. Immunocytochemistry was performed on non-transfected chromaffin cell cultures to identify chromogranin A-containing cells (chromaffin cells) and α -synuclein (with a α -synuclein-specific antibody, Abcam 138501). The paired panels **A** and **B**, **C** and **D**, and **D** and **E** are each of the same field, each containing several cells. Identical confocal microscope settings were used for the α -synuclein panels. Similarly, identical confocal microscope settings were used for the chromogranin A panels. Neighboring chromaffin cells had highly variable α -synuclein staining.

Suppl. Fig. 3. Localization of transiently expressed α - or β -synuclein in chromaffin cells.

Bovine chromaffin cells transiently expressing either unlabeled α - or unlabeled β -synuclein together with soluble GFP to identify the transfected cells. Synuclein was identified with antibody that recognizes both α - and β - isoforms of bovine synuclein (DSHB H3C). (A, B) Cells transiently expressing α -synuclein. Neighboring non-transfected cells are outlined in white. (C, D) Cells transiently expressing β -synuclein. Two transfected cells in C. are separated by a green line. Neighboring non-transfected cells are outlined in white. Scale bars = 2 μ m.

Suppl. Fig. 1 Anti-Synuclein Antibodies and Bovine α - and β -Synuclein Sequences

α -synuclein	1	MDVFMKGLSKAKEGVVAAAEEKTKQGVAAEAAAGRTKEGVLYVGSKTKEGVVHGVTVAEKT	60
β -synuclein		MDVFMKGLSMMAKEGVVAAAEEKTKQGVTEAAEKTKEGVLYVGSKTKEGVVQGVASVAEKT	
α -synuclein	61	EQVTNVGEAVVTGVTAVAQKTVEGAGSIAAATGFGKGDHMGKGEEGASQEGILEDMPVDP	120
β -synuclein		EQASHLGGAVFS-----GAGNIAAATGLVKKEEFPTDLKPEEVAQEAAEEPLIE	109
α -synuclein	121	DNEAYEMPSEEG-----YQDYEPEA	140
β -synuclein	110	PLMEPEGESYEEQPQEEYQEYEPEA	134

differences in α - and β -synuclein sequences

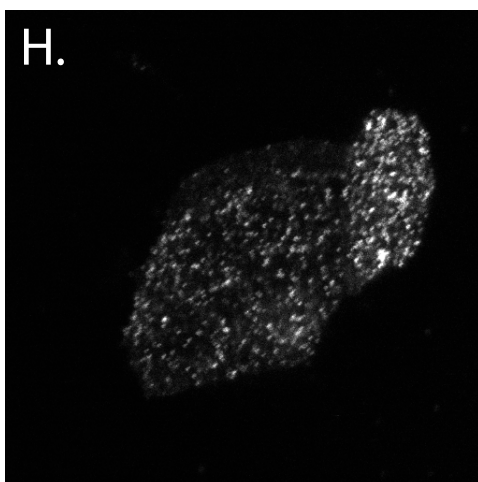
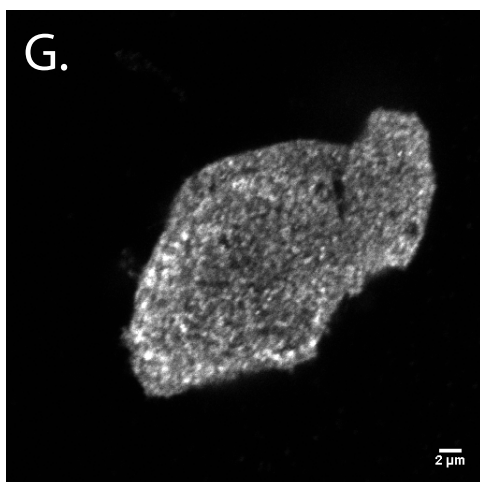
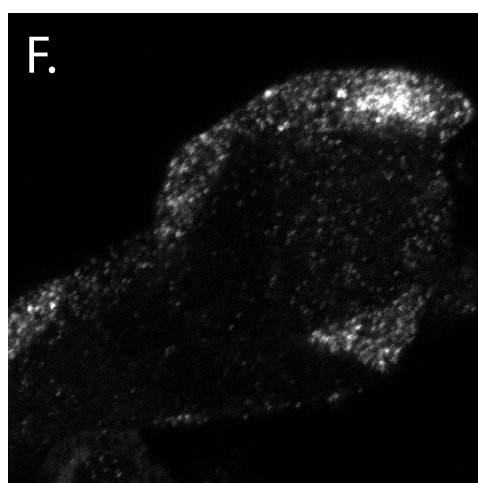
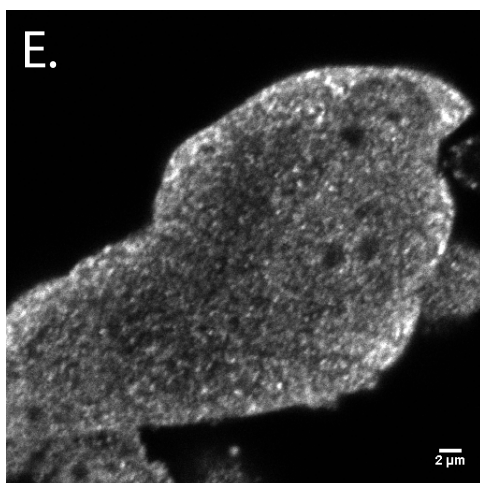
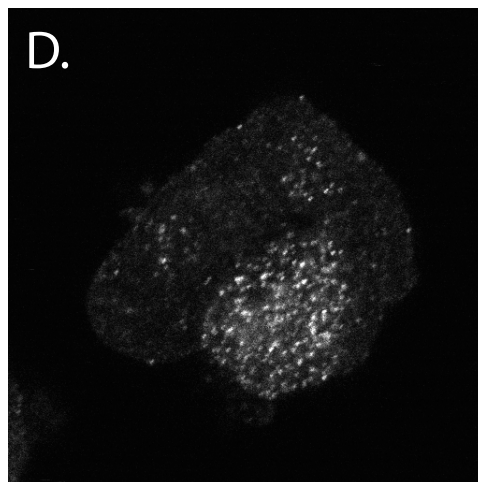
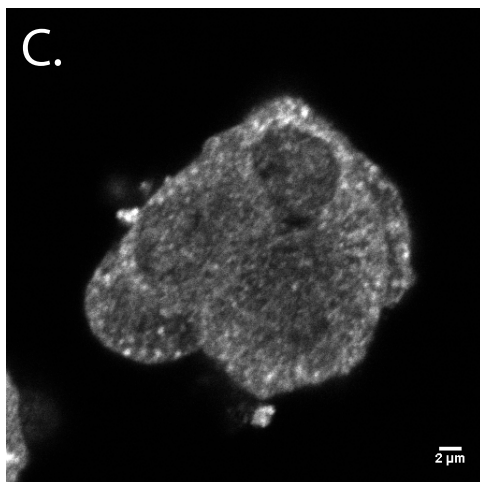
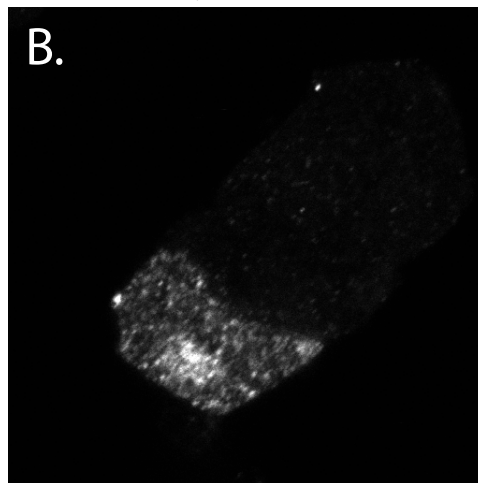
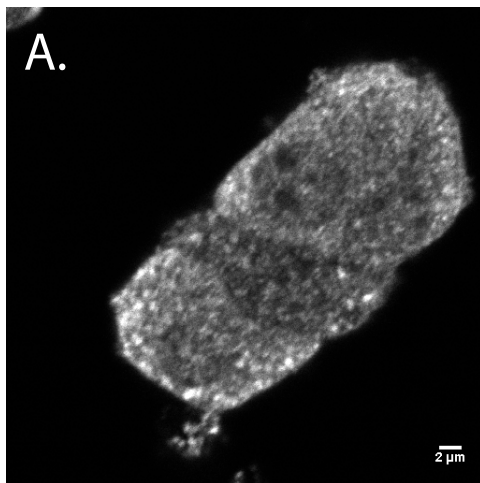
rabbit 'mab' Abcam 138501

mouse mab DSHB H3C

rabbit Abcam 15532 (not depicted)

Chromogranin A

α -synuclein



Suppl. Fig. 3

