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(71) Applicant (for all designated States except US): UNITED
NEUROSCIENCE; 1 Cayman Financial Centre, 36A Dr.

Roy's Drive, P.O. Box 2510, Grand Cayman, KY1-1104
(KY).

(71) Applicant (for US only): UBI US HOLDINGS, LLC.
[US/US]; 25 Davids Drive, Hauppauge, New York 11788
(US).

(72) Inventor: WANG, Chang Yi; 47 Snake Hill Road, Cold
Spring Harbor, New York 11724 (US).

(74) Agent: FILL, Peter et al.; Locke Lord LLP, 3 World Fi-
nancial Center, New York, New York 10281 (US).

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(54) Title: PEPTIDE IMMUNOGENS FROM THE C-TERMINAL END OF ALPHA-SYNUCLEIN PROTEIN AND FORMU-
LATIONS THEREOF FOR TREATMENT OF SYNUCLEINOPATHIES

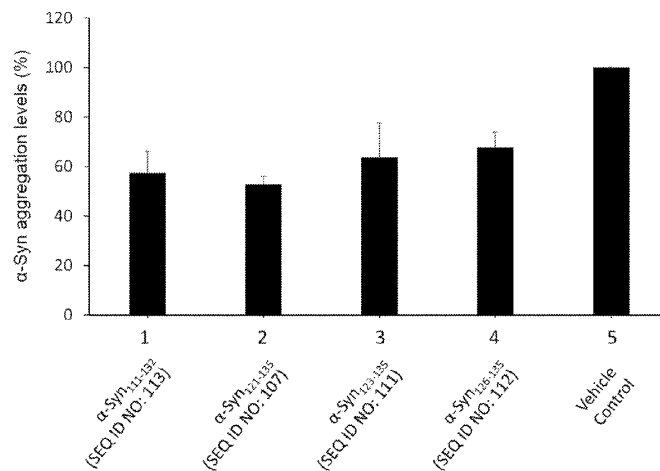


Figure 1

(57) Abstract: The present disclosure is directed to alpha-synuclein (α Syn) peptide immunogen constructs, compositions containing the constructs, antibodies elicited by the constructs, and methods for making and using the constructs and compositions thereof. The disclosed α Syn peptide immunogen constructs contain a B cell epitope from α Syn linked to a heterologous T helper cell (Th) epitope directly or through an optional heterologous spacer. The B cell epitope portion of the peptide immunogen constructs contain about (10) to about (25) amino acid residues of α Syn, corresponding to the sequence from about the Glycine at position 111 (G111) to about the Asparagine at position (135) (D135) of full-length α Syn. The α Syn peptide immunogen constructs stimulate the generation of highly specific antibodies that are cross-reactive with the beta-sheet of α Syn as monomers, oligomers, and fibrils, but not the natural

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