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(54) Title: IMMUNOGENIC COMPOUNDS

(57) Abstract: An antigenic peptide comprises the structure $X_1-X_2-X_3-X_4-X_5-X_6-X_7-P-X_9-X_{10}-X_{11}-X_{12}$ and is derived from amino acids 113-124 of alpha synuclein. According to the structure: P is proline; X_1 is L, K, A or S, wherein L is leucine, K is lysine, A is alanine and S is serine; X_2 is E or S, wherein E and S are as defined above; X_3 is D, E, K, N, A or S, wherein N is asparagine, D is aspartic acid and E, K, A and S are as defined above; X_4 is M, A, S, L or K, wherein M is methionine and A, S, L and K are as defined above; X_5 is P or A as defined above; X_6 is V, A or S, wherein V is valine and A and S are as defined above; X_7 is D or S as defined above; X_9 is D or A as defined above; X_{10} is N, S or A, wherein N, S and A are as defined above; X_{11} is E, A or S, wherein E, A and S are as defined above; X_{12} is present or not and, if present, is A, K, V, S, or G wherein G is glycine and A, K, V and S are as defined above. The structure comprises at least one mutation compared to the wild type L-E-D-M-P-V-D-P-D-N-E-A sequence. The peptide does not comprise the dipeptide Y-E immediately following X_{12} , wherein Y is tyrosine and E is as defined above. The peptides are conjugated to a suitable carrier and useful in treating synucleinopathies.

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