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(54) **Title:** GLP-1 (GLUCAGON-LIKE PEPTIDE-1) FUSION POLYPEPTIDES WITH INCREASED PEPTIDASE RESISTANCE

(57) **Abstract:** The present invention provides fusion peptides having GLP-1 activity and enhanced stability in vivo, in particular resistancy to dipeptidyl peptidase IV. The fusion peptide comprises as component (I) N-terminally a GLP-1 (7-35, 7-36 or 7-37) sequence and as component (II) C-terminally a peptide sequence of at least 9 amino acids or a functional fragment, variant or derivative thereof. Component (II) is preferably a full or partial version of IP2 (intervening peptide 2). A preferred embodiment comprises the sequence GLP-1 (7-35, 36 or 37)/IP2/GLP-1(7-35, 36 or 37) or GLP-2. The fusion peptide may be produced in engineered cells or synthetically and may be used for the preparation of a medicament for treating various diseases or disorders, e.g. diabetes type 1 or 2, apoptosis related diseases or neurodegenerative disorders.

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