Text of the abstract

The invention provides ultra-small peptide inhibitors that are capable of preventing amyloid formation/amyloidosis, wherein said peptide inhibitors have the general formula Z-(X)m-Proline-(X)n and wherein *Z* is an N-terminal protecting group; X is, at each occurrence, independently selected from nonaromaticamino acids; and m and n indicate the number of amino acids and are integers independently selected from 1 to 5, with m + n being ≤ 6, and wherein the N-terminal amino acid of said peptide is more hydrophobic than the C-terminal amino acid of said peptide. These ultra-small peptide inhibitors are useful in the treatment of diseases associated with amyloidosis, such as neuro-degenerative diseases, prion-related or spongiform encephalopathies, non-neuropathic localized diseases and systemic amyloidosis and systemic amyloidosis.