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(54) Title: SINGLE-MOLECULE PROTEIN AND PEPTIDE SEQUENCING

(57) Abstract: The present description provides methods, assays and reagents useful for sequencing proteins. Sequencing proteins in a broad sense involves observing the plausible identity and order of amino acids, which is useful for sequencing single polypeptide molecules or multiple molecules of a single polypeptide. In one aspect, the methods are useful for sequencing multiple polypeptides. The methods and reagents described herein can be useful for high resolution interrogation of the proteome and enabling ultrasensitive diagnostics critical for early detection of diseases.

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