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(54) Title: NATIVE MICROFLUIDIC CE-MS ANALYSIS OF ANTIBODY CHARGE HETEROGENEITY

(57) Abstract: Methods for detecting and/or discriminating between post-translational modification variants of an antibody of interest in a sample. The methods including: contacting a sample comprising one or more antibodies of interest with a protease to digest the sample into antibody fragments; separating antibody fragments by molecular weight and/or charge in one or more capillaries using capillary electrophoresis; eluting separated antibody fragments from the one or more capillaries; and determining the mass of the eluted antibody fragments by mass spec analysis, thereby detecting and/or discriminating between post-translational modification variants of the antibody of interest.



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