A study on human serum albumin influence on glycation of fibrinogen.

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Although in vivo glycation proceeds in complex mixture of proteins, previous studies did not take in consideration the influence of protein-protein interaction on Maillard reaction. The aim of our study was to test the influence of human serum albumin (HSA) on glycation of fibrinogen. The isotopic labeling using [(13)C6] glucose combined with LC-MS were applied as tool for identification possible glycation sites in fibrinogen and for evaluation the effect of HSA on the glycation level of selected amino acids in fibrinogen. The obtained data indicate that the addition of HSA protects the fibrinogen from glycation. The level of glycation in presence of HSA is reduced by 30-60% and depends on the location of glycated residue in sequence of protein.

Słowa kluczowe

Fibrinogen, Glycation, HSA, Proteins interactions, Stable isotopes.

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