

Abstract

Serum albumin (SA) is a multifunctional, high abundance protein that is found in many organisms. Bioinformatic analysis of several orthologs of serum albumin reveal a consistent potential interaction with Fetuin-A (AHSG), a glycoprotein also present in the plasma, with established roles in blood glucose regulation and insulin resistance. Potential direct interaction between the two proteins has been suggested, but not yet experimentally investigated. Physical interaction between SA and AHSG will have mechanistic implications on blood sugar regulation and disorders, such as type 2 diabetes. Pull-down assays were used to probe the potential interaction between human serum albumin (HSA) and AHSG. SDS-PAGE analysis and Western blotting were used to detect protein profiles. Analysis of assay data suggests that HSA and AHSG proteins physically interact.