Effect of dioxane on the hydration of human serum albumin as studied by isothermal calorimetry and IR spectroscopy

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Abstract

A comparison of isothermal calorimetry data on the interaction of human serum albumin with water in the presence and absence of dioxane and of the isotherms of adsorption of vapors of water and dioxane on HSA as measured by IR spectroscopy made it possible to suggest an experimental method for isolating the contribution from the organic solvent to the thermodynamic and sorption characteristics of hydration of the protein over the entire range of water activities. © Pleiades Publishing, Inc., 2006.

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