

## Non-Saturable Binding of a Pharmacological Xanthone Compound Isolated from Mangoes

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Mangiferin (MGF) isolated from *Mangifera indica L.* is a pharmacologically-active compound that has been reported to have multiple biological effects, as anti-inflammatory and scavenger activities of free radicals. In this study the interaction between MGF and serum albumin (BSA) was investigated in 0.1M phosphate buffer pH 7.3 by visible and UV-difference spectra, thought the major role of this protein in drug transport. The results showed two absorption peaks at 240 and 380nm, with decrease of absorbance values in the presence of BSA. One-independent class of binding sites was found for the interaction with an apparent binding constant of  $56.7 \pm 15.9 \mu\text{M}$  at lower ligand concentration. Furthermore nonlinear adjustments of binding equations applied to the data showed a nonspecific component under higher ligand concentrations, suggesting an overloading of MGF molecules on the protein surface.

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