Electronic Supplementary Material (ESI) for RSC Advances.

Supplementary Information

A comparative binding mechanism between human serum albumin and α-1-acid glycoprotein with corilagin: Biophysical and computational approach

Daniel Pushparaju Yeggoni[†] , Aparna Rachamallu [‖], Rajagopal Subramanyam[†*]

[†]Department of Plant Sciences, School of Life Sciences, University of Hyderabad, Hyderabad 500046, India

[‖]National Institute of Animal Biotechnology, Axis Clinicals Building, Miyapur, Hyderabad, 500049, India

*Corresponding author
Rajagopal Subramanyam
Tel: +91-40-23134572
Fax: +91-40-23010120
Email:srgsl@uohyd.ernet.in

Figure S1.

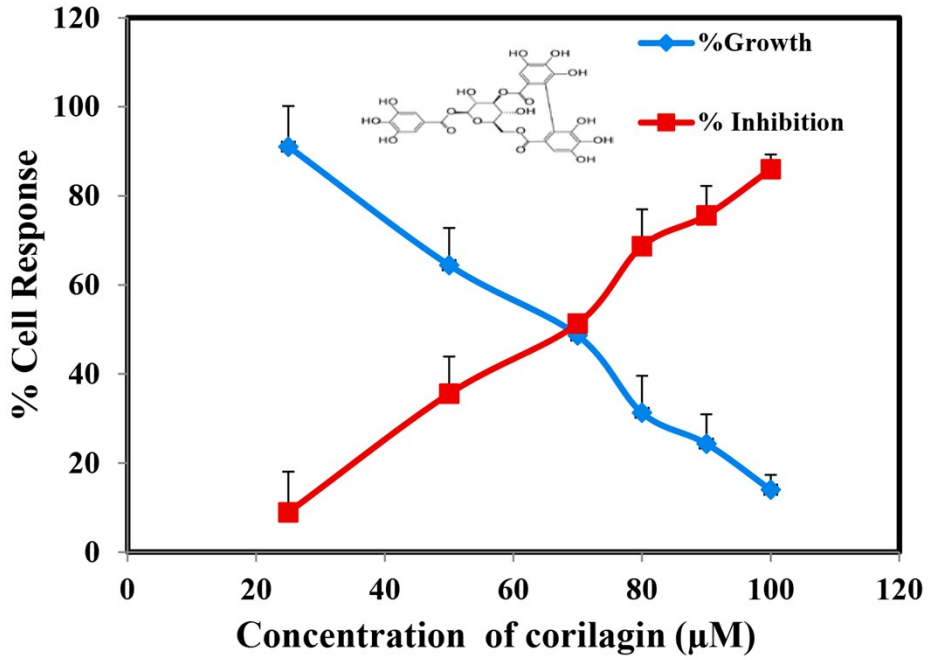

Figure S1.

Corilagin is showing anti-inflammatory properties against LPS induced mouse macrophages (RAW 264.7) in a dose-dependent manner. Cell growth was measured by the MTT assay. Insert shows the structure of Corilagin and the molecular formula ($C_{27}H_{22}O_{18}$) and mass, 634.45 Da, respectively.

Figure S2.

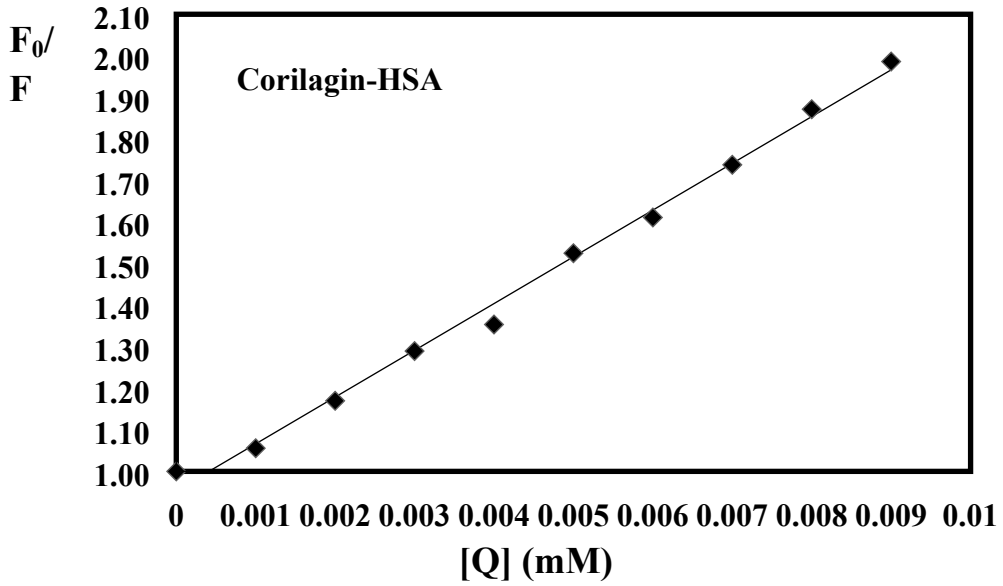

Figure S2.

Stern-Volmer plots of HSA- Corilagin complexes showing fluorescence quenching constant (Kq) and plot of Fo/F against [Q] for Corilagin.

Figure S3.

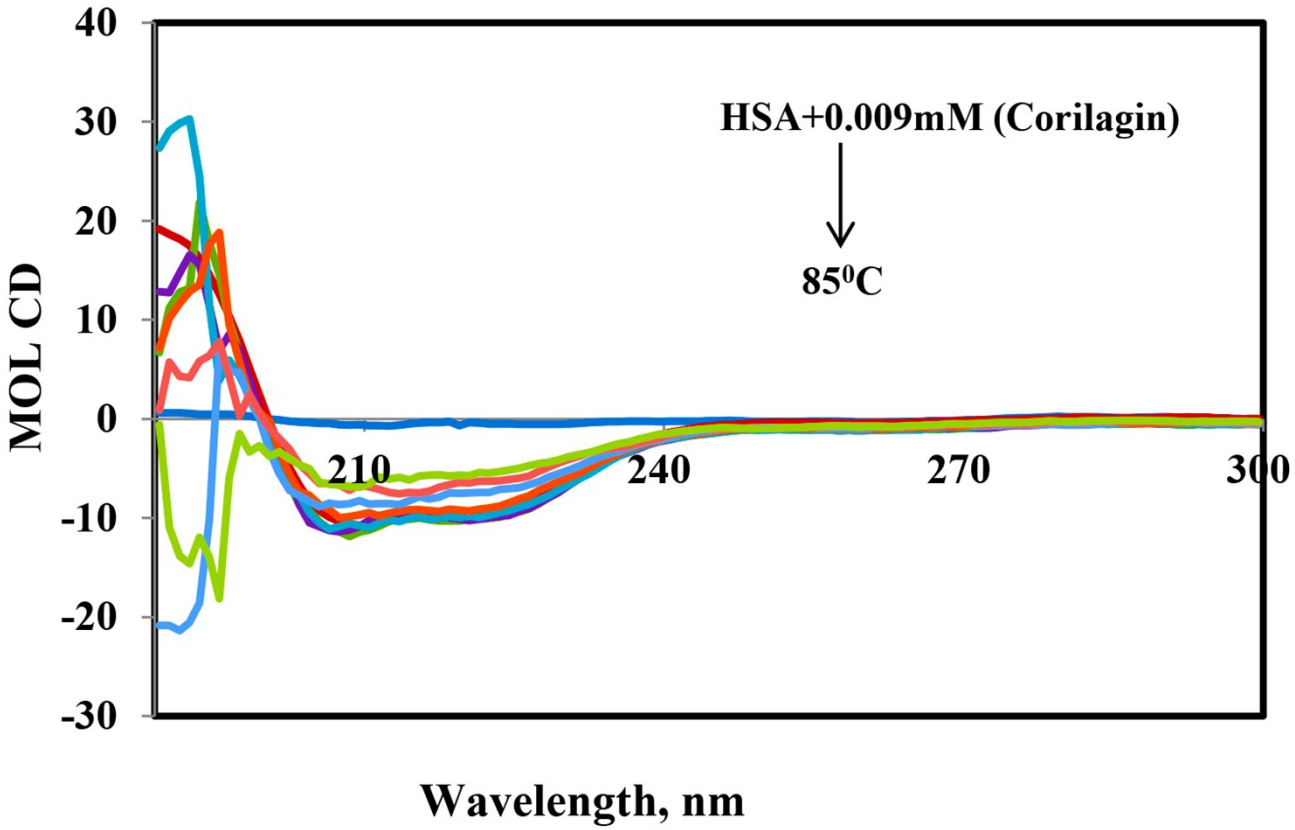

Figure S3.

Temperature-dependent CD-Spectra of HSA+corilagin complexes. HSA-corilagin complexes with temperature dependent. The temperature dependence for HSA-corilagin complexes from 25°C to 85°C with an interval of 10°C.

Figure S4.

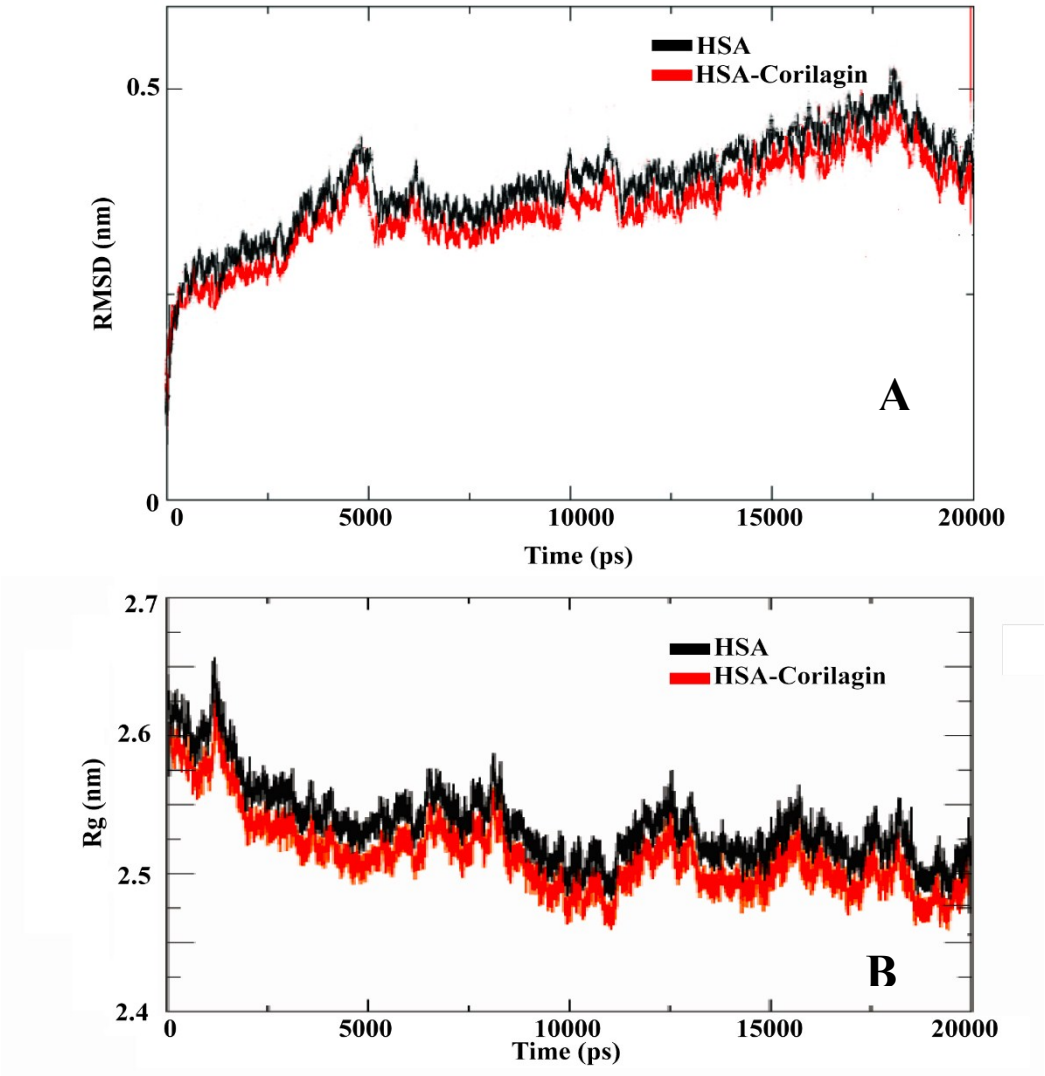

Figure S4.

(A)The Root mean square deviation (nm) of unligand HSA and ligand HSA (HSA- corilagin) for 20ns . (B) The Time dependence of the radius of gyration (Rg) for the backbone atoms of unligand HSA and ligand HSA (HSA- corilagin) for 20ns.