Supporting Information

Mannose conjugated multi-layered polymeric nano carrier system for controlled and targeted release on alveolar macrophages

Rajendran Amarnath Praphakar[a], H. Shakila[b], Vijayan N. Azger Dusthackeer[c], Murugan A. Munusamy[d], Suresh Kumar[e], Mariappan Rajan*[a]

[a]Biomaterials in Medicinal Chemistry Laboratory, Department of Natural Products Chemistry, School of Chemistry, Madurai Kamaraj University, Madurai-625021, Tamil Nadu, India.

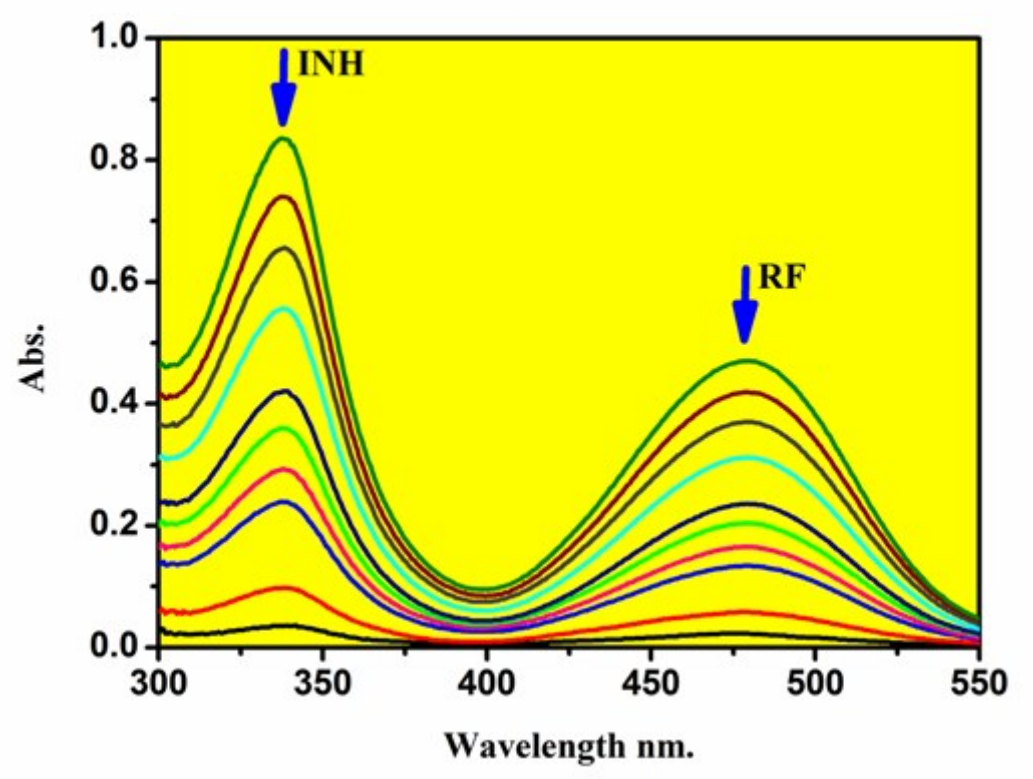
[b]Department of Molecular Microbiology, School of Biotechnology, Madurai Kamaraj University, Madurai-625021, Tamil Nadu, India

[c]Department of Bacteriology, National Institute for Research in Tuberculosis, Chennai, Tamil Nadu, India

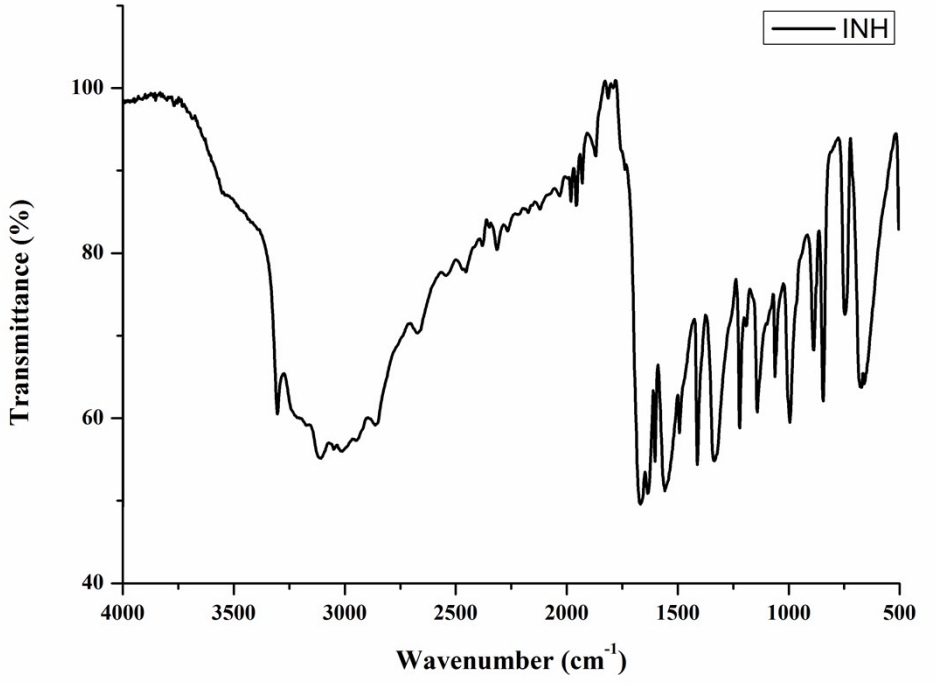
[d]Department of Botany and Microbiology, King Saud University, Riyadh, 11451, Saudi Arabia

[e]Department of Medical Microbiology and Parasitology, Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia

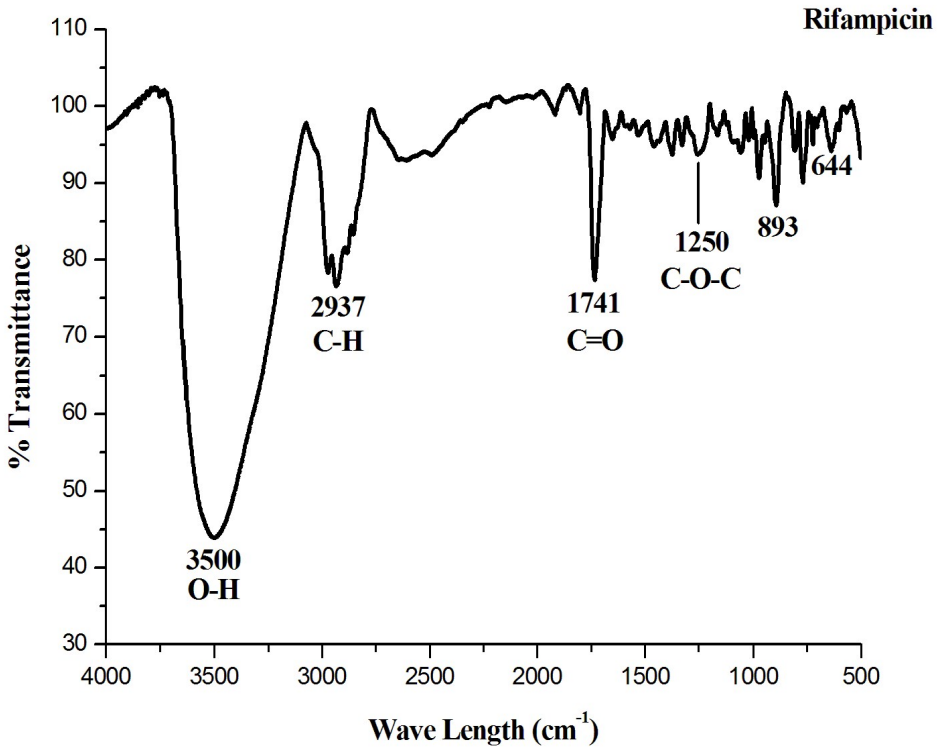
*Tel.: +91 9488014084; Fax: 0452-2459845; Email: rajanm153@gmail.com (M. Rajan)



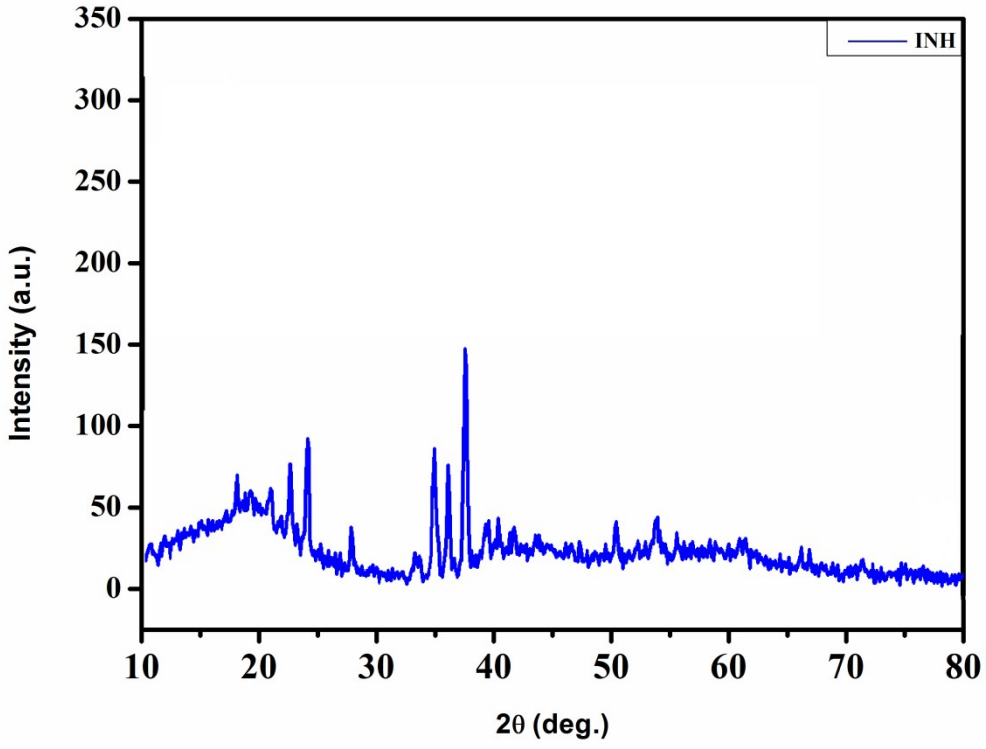
S. Figure. 1. Encapsulation efficiency of INH loaded SA-g-AA-RF/CS-g-AA-M



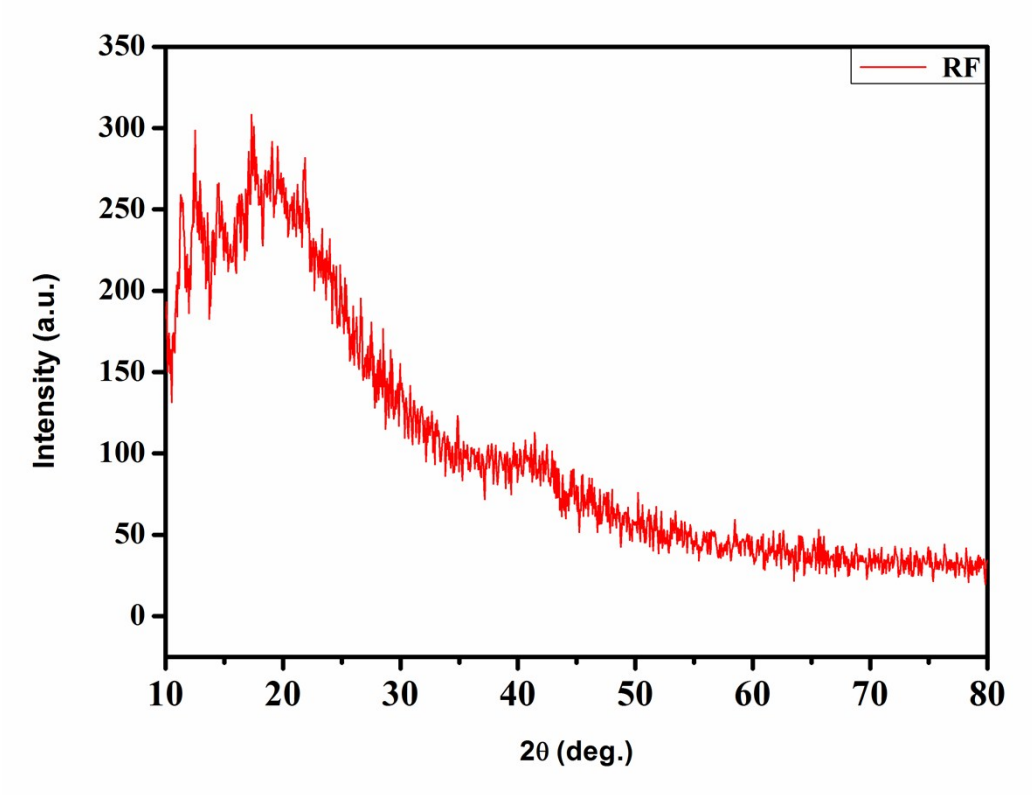
S.Figure.2. FT-IR spectrum of INH



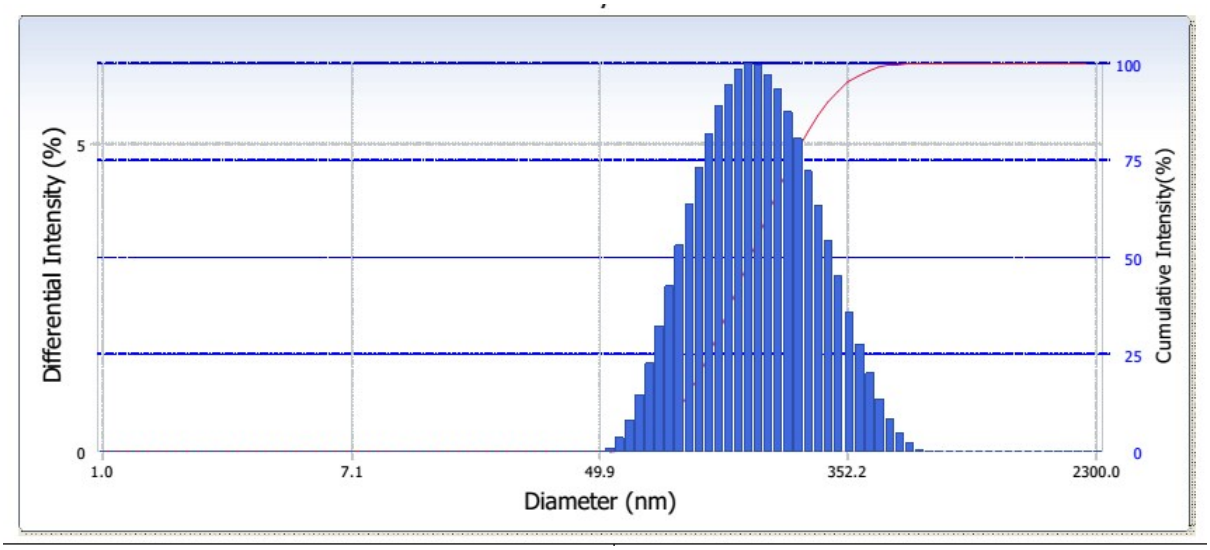
S.Figure.3. FT-IR spectrum of RF



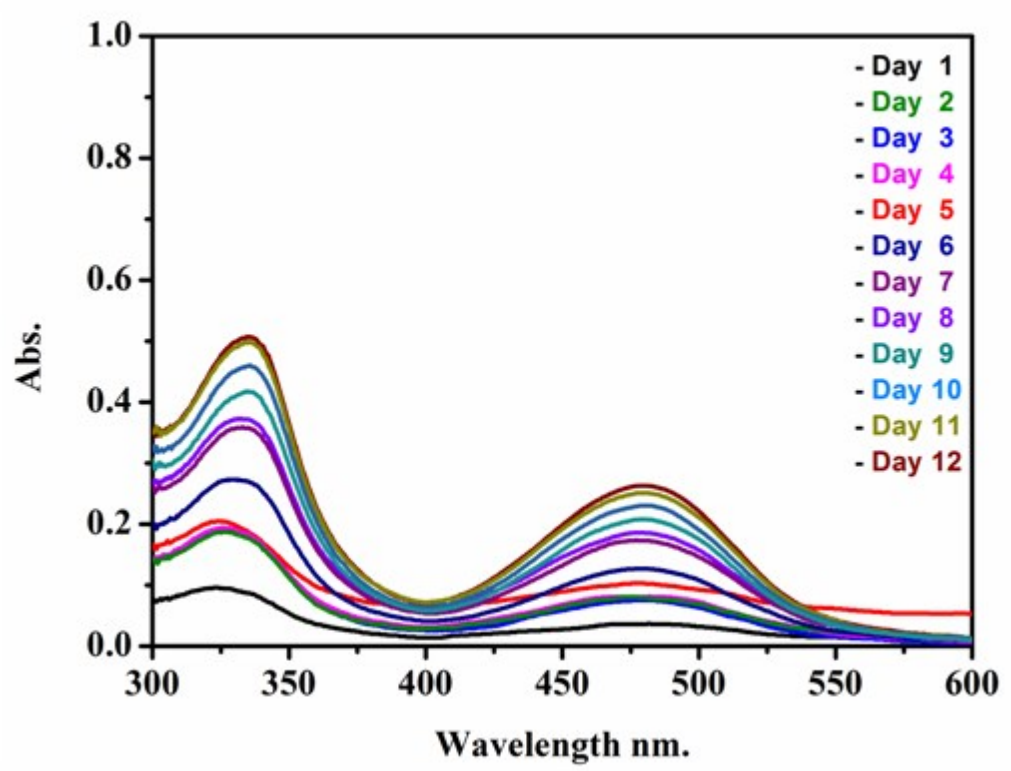
S.Figure.4. XRD pattern of INH



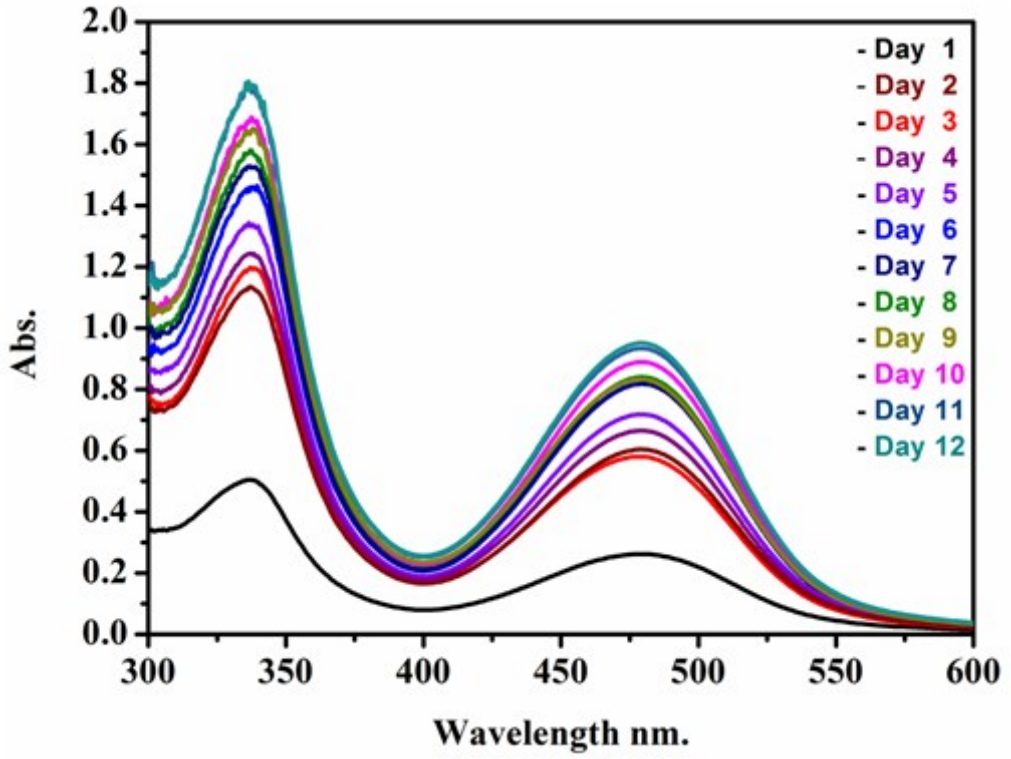
S.Figure.5. XRD pattern of RF



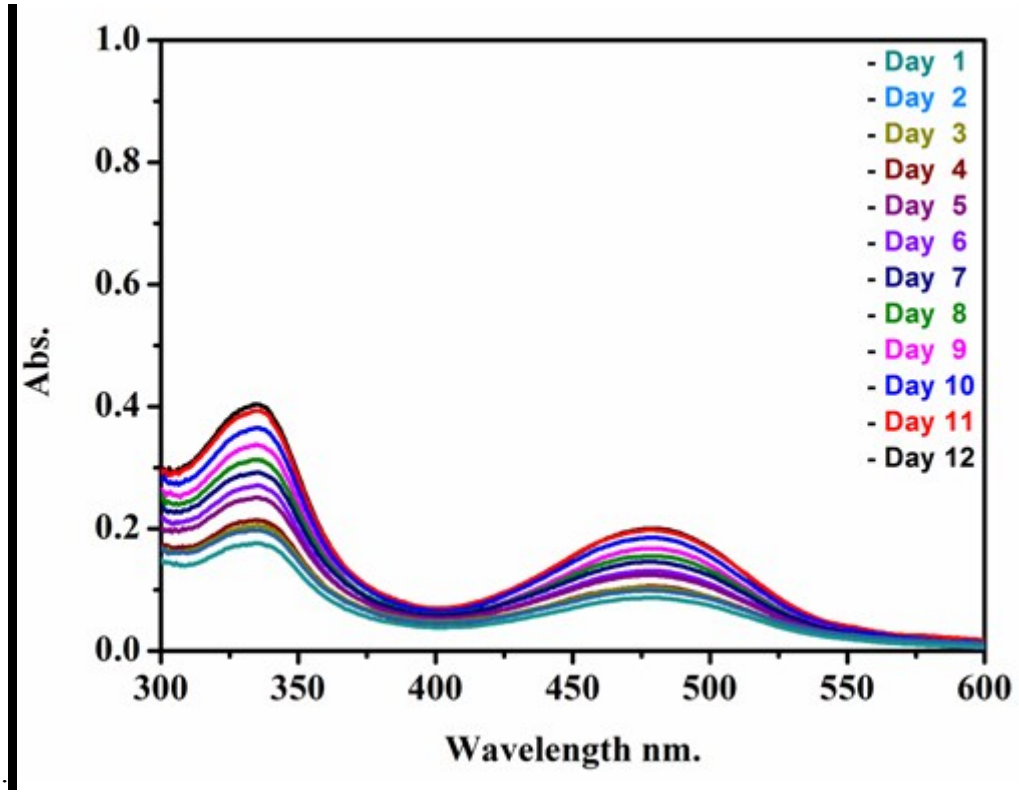
S.Figure.6. Particle size of INH loaded SA-g-AA-RF/CS-g-AA-M



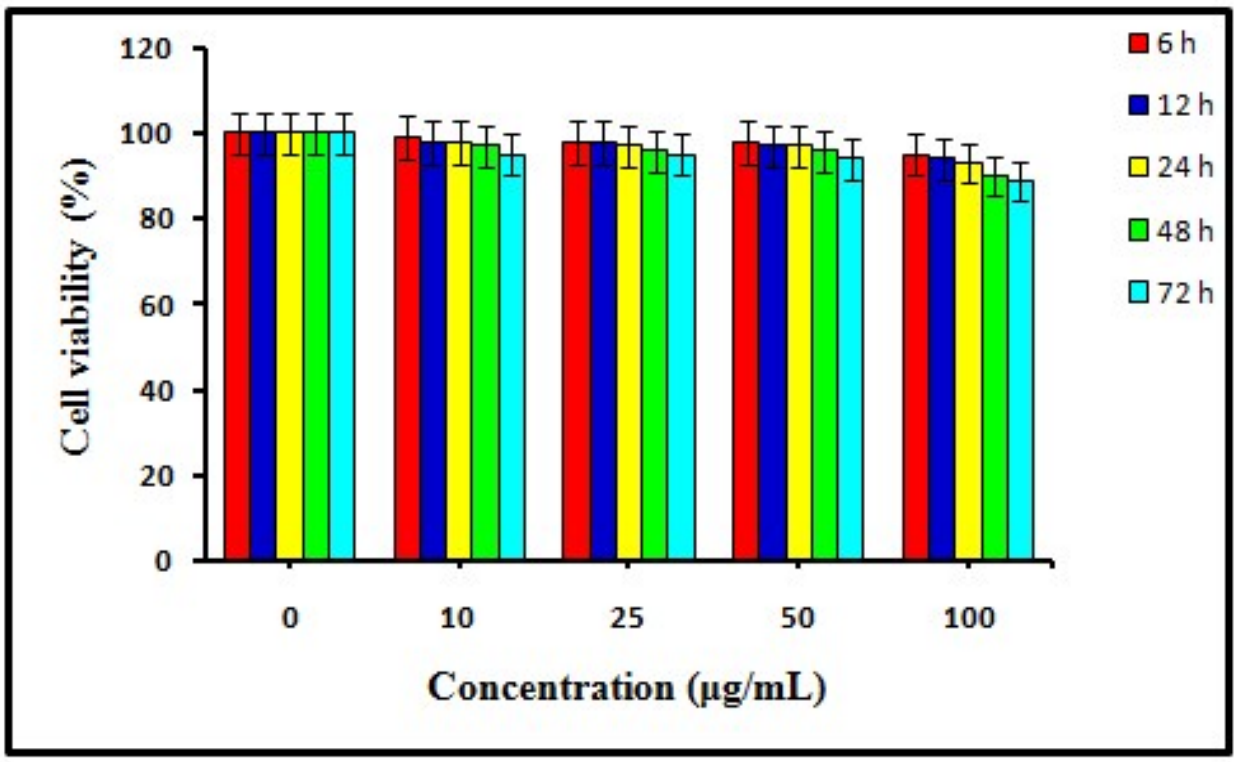
S.Figure.7. *In-vitro* drug release behaviour of INH loaded SA-g-AA-RF/CS-g-AA-M at pH 1.2.



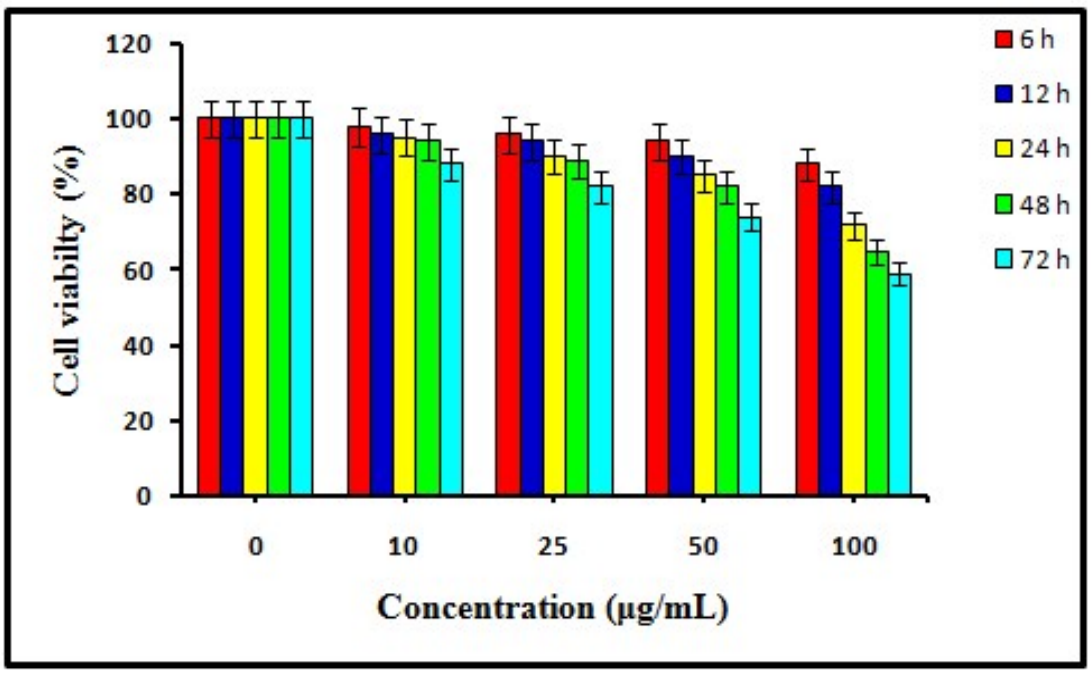
S.Figure.8. *In-vitro* drug release behaviour of INH loaded SA-g-AA-RF/CS-g-AA-M at pH 5.5.



S.Figure.9. *In-vitro* drug release behaviour of INH loaded SA-g-AA-RF/CS-g-AA-M at pH 7.4.



S.Figure.10. Cell viability assay of CS-g-AA-M



S.Figure.11. Cell viability assay of SA-g-AA-RF

S.Table.1. Concentration of INH loaded SA-g-AA-RF/CS-g-AA-M nano particles

	RF + INH	INH loaded SA-g-AA-RF/CS-g-AA-M nano particles
1	0	0
2	10	0.063 mg
3	25	0.157 mg
4	50	0.314 mg
5	100	0.628 mg