## **SUPPLEMENTAL DATA**

## **FTIR**

FTIR spectroscopy was carried out using a Perkin Elmer emission spectrometer. Very little amount of sample (1–2 mg) was placed on diamond ATR plate. The diffraction patterns were recorded over a wave number region of 4000–400 cm<sup>-1</sup>. FTIR spectra of S-superSNEP, FB, CPE (PVA-F100) F100, PVA are shown in Fig. 1 of the supplementary file. FB showed specific peaks at 1725.4, 1651.0, 1598.9 cm<sup>-1</sup> that corresponded to C=O, C=C stretching of the carboxylate group respectively [1]. The bands in the region of 900–600 cm<sup>-1</sup> indicated the presence of aromatic rings. S-superSNEP did not show any additional FTIR bands, confirming that there was no chemical interaction between FB and the excipients (PVA-F100) after adsorption.

1. Kumar R, Siril PF. Enhancing the Solubility of Fenofibrate by Nanocrystal Formation and Encapsulation. AAPS PharmSciTech. 2018;19(1):284-292.

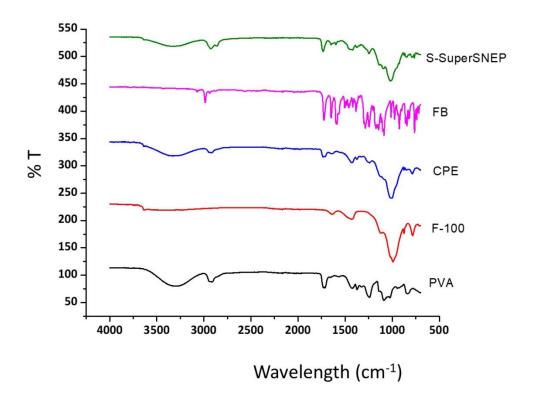


Figure 1. FTIR spectra of S-superSNEP, FB, CPE (PVA-F100) F100, PVA.