

Supplementary Table 1. Physicochemical properties and technological characterization of the NP-Nut, NP-Rt and NP-Rt-Nut preparations.

| Samples | Size (nm) | PDI | z- potential (mV) | % PVA residual | [EE]^a (%) | Drug content^b (%) |
|------------------|------------------|--------------|--------------------------|-----------------------|-----------------------------|-------------------------------------|
| NP | 179 (14) | 0.04 (0.003) | -13 (3) | 6.7 (0.3) | | |
| NP-Nut | 189 (15) | 0.08 (0.02) | -3 (1) | 6.7 (0.3) | 59 (7) | 5.0 (0.7) |
| NP-Rt | 212 (14) | 0.18 (0.02) | - 12 (2) | 4.5 (0.4) | | |
| NP-Rt-Nut | 223 (16) | 0.12 (0.02) | - 10 (4) | 3.4 (0.2) | 44 (8) | 4.0 (0.8) |

Values are means±SD (*n*=9). PDI: polydispersivity index; PVA: polyvinyl alcohol; EE: encapsulation efficiency; Nut, Nutlin-3; Rt, Rituximab.

^aThe percentage of EE was determined as the ratio of the encapsulated out of the total (encapsulated+free) drug. ^bThe percentage of drug content was expressed as the ratio of the encapsulated drug out of the total mass (encapsulated drug+ polymer).