**Supplementary Material:**

**Integrin Receptor-targeted, Doxorubicin-Loaded Cerium Oxide Nanoparticles Delivery to Combat Glioblastoma**

1. Chemicals and Reagents

Cerium III chloride heptahydrate (sigma 18618-55-8), β cyclo dextrin (BCD) (SRL76496), F127 (sigma 9003-11-6), Doxorubicin Hydrochloride (Sigma D1515). Local suppliers supplied all other reagents. Materials used for peptide synthesis were purchased from Sigma. FmocLys-OH hydrochloride (Sigma#17290), Fmoc-L-phenylalanine (Sigma#338338), FmocAsp(OtBu)-OH (Sigma#47618), Fmoc-Gly-OH (Sigma#47627), Fmoc-Asp(OtBu)-OH (Sigma#47618), DIPEA (N, N Di isopropyl ethylamine) (Sigma#03439) and HBTU (Sigma#128040).

1. Cell culture requirements and Antibodies

The mouse glioblastoma cells GL261 and Human glioblastoma cell line U87MG were obtained from ATCC and the RAW 264.7 cell line was purchased from the National Centre for Cell Science (NCCS, Pune) and are maintained at 37°C, 95% RH and 5% CO2 conditions. Cell culture requirements and antibodies were purchased from various suppliers. DMEM (Himedia AT186), FITC-AnnexinV (Sigma APOAF-50TST), FITC-anti-mouse α5β1 Mab (Merk MAB1969), FITC-anti-mouse α5β3 Mab (Merk MAB1976), FITC-anti-mouse α5β5 Mab (Merk MAB1961). FITC-labelled anti-goat rabbit conjugated secondary antibody (Invitrogen#31569). DiR dye (D12731). All CD markers were purchased from Milteny Biotech, USA. CD11b mouse magnetic beads (130-049-601), anti-mouse CD80-FITC (30- 102-532),) anti-mouse CD11b-FITC (130-113-234), anti-mouse CD68-PE (130-102-614), anti-mouse Ly6c-FITC (130-102-295), anti-mouse CD206-FITC (BIO-RAD, USA, MCA2235FT). Anti-rabbit iNOS (CST#13120) and Anti-rabbit Arginase-1(CST#93668) were purchased from Cell Signalling Technology, LS columns were purchased from GeneX India Bioscience Pvt. Ltd. (LS 130-042-401).