

Chitosan-Dextran sulfate coated doxorubicin loaded PLGA-PVA- nanoparticles caused apoptosis in doxorubicin resistance breast cancer cells through induction of DNA damage.

Sumit Siddharth¹, Anmada Nayak¹, Deepika Nayak¹, Birendra Kumar Bindhani^{2*}, Chanakya Nath Kundu^{1*}

¹Cancer Biology Division, KIIT School of Biotechnology, KIIT University, Campus-11, Patia, Bhubaneswar, Odisha, 751024, India.

² Plant Biotechnology and Nanotechnology Division, KIIT University, Campus-11, Patia, Bhubaneswar, Odisha, 751024, India.

Short title: Sensitivity of double coated DOX-NP against DOX resistance cancer cells.

To whom correspondence should be addressed: ^{*1}Chanakya Nath Kundu, Cancer Biology Division, KIIT School of Biotechnology, KIIT University, Campus-11, Patia, Bhubaneswar, Orissa, 751024, India. Tel. : +91-0674-272-5466; Fax: +91-0674-272-5732; E-mail: cnkundu@gmail.com and Birendra Kumar Bindhani^{2*}, Plant Biotechnology and Nanotechnology Division, KIIT University, Campus-11, Patia, Bhubaneswar, Odisha, 751024, India. Tel. : +91-0674-272-5466; Fax: +91-0674-272-5732; E-mail: drbindhani@gmail.com

Methods and material:

- 1) It is confirmed that all methods were carried out in accordance with relevant guidelines and regulations.
- 2) In current MS we did not use any animal or human subject so Institutional ethical approval is not needed. All the experiment is carried out in in vitro cell culture system.
- 3) Original western blot has given below. We have provided different exposure of blot PARP-1. Lower exposure blot is used in the final MS.

Figure 5a

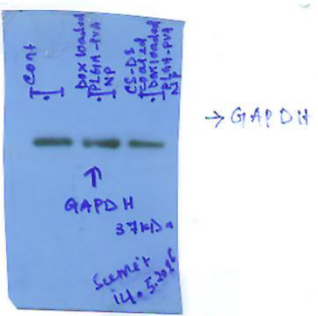
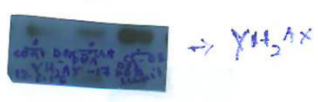
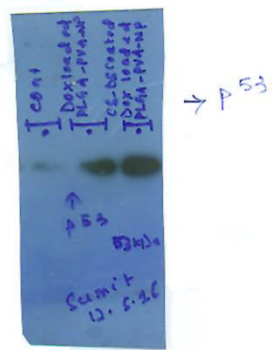
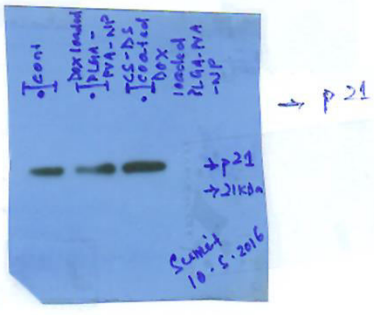


Figure 4c

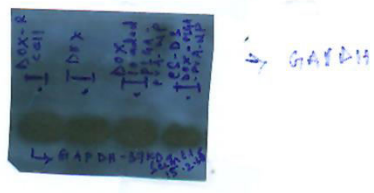
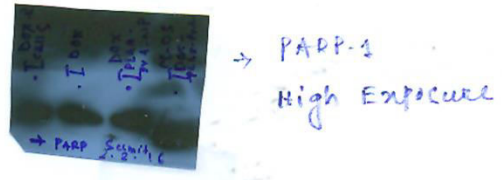
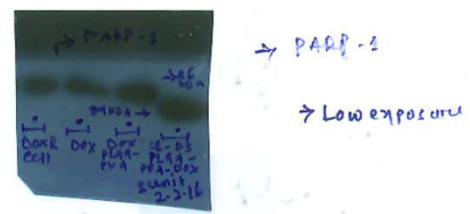
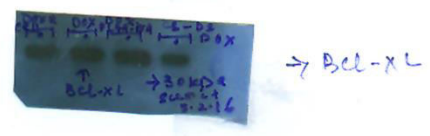


Figure: Original western blot images.