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Bioreducible polymer-mediated delivery of oncolytic adenovirus can attenuate antiviral immune response and concurrently enhance induction of antitumor immune response to effectively prevent metastasis

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Keywords: oncolytic adenovirus, gene therapy, polymer, antitumoral immune response, antiviral immune response, nanomaterial

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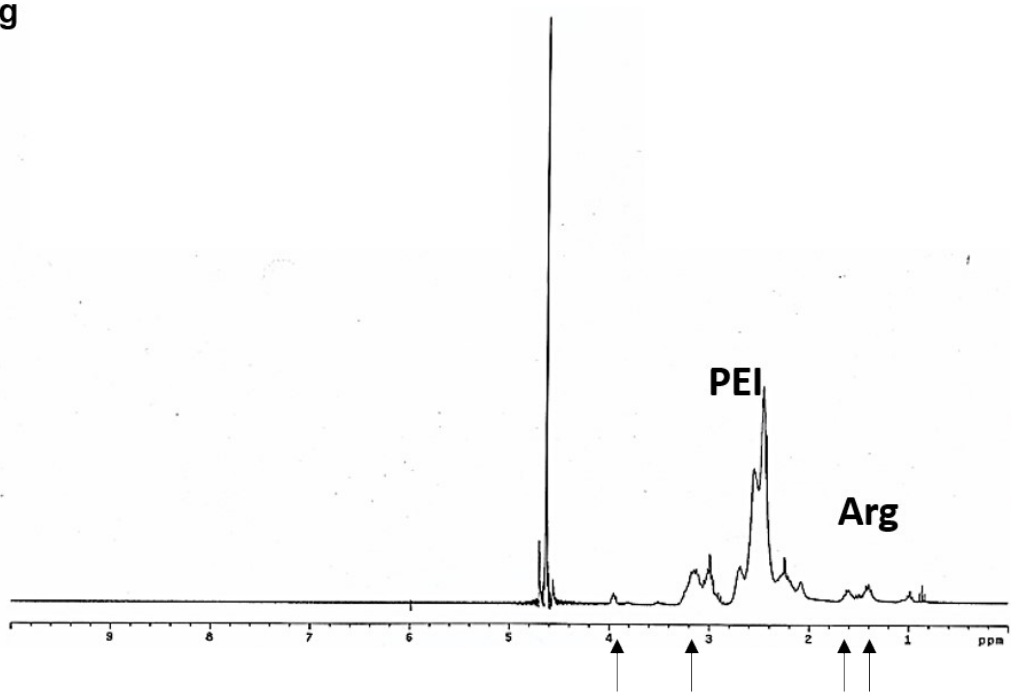
Fig.S1.

A.

PEI-Arg



B.

PEI-Arg-mPEG (PAP)

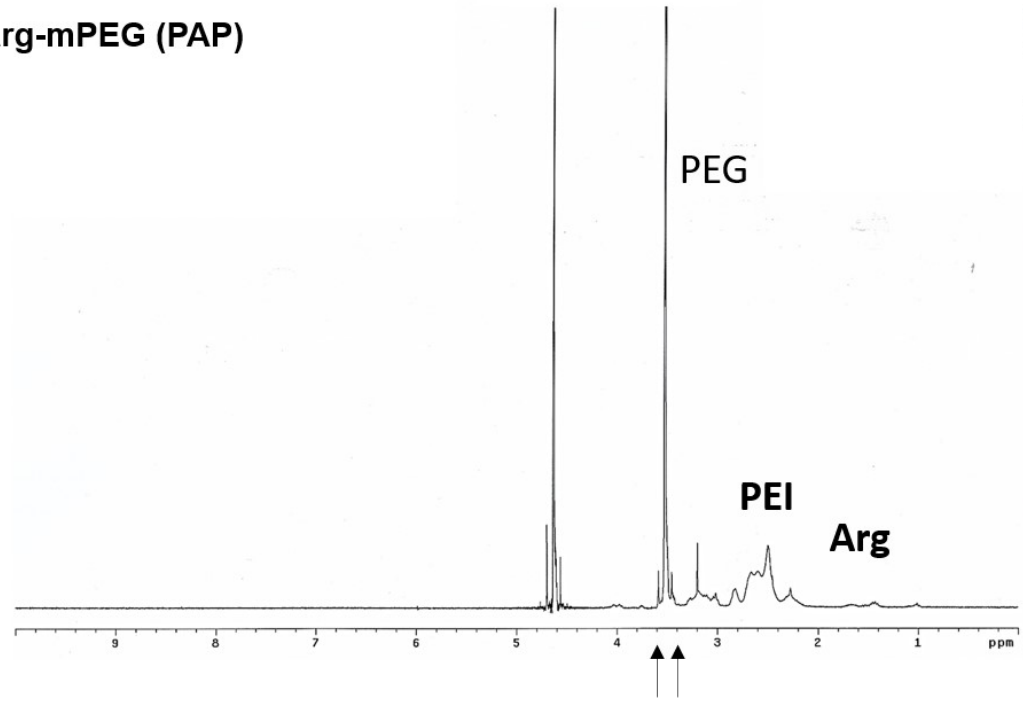


Fig. S1.

C.

PEI-Arg-mPEG-S-S-mPEG-Arg-PEI (PAPS)

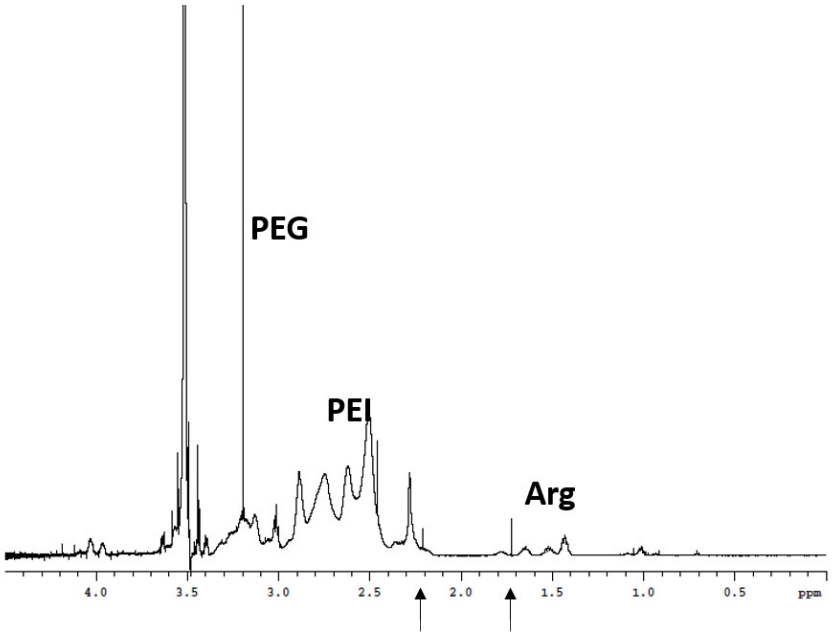


Fig. S1. ^{1}H NMR spectra of samples were analyzed in D_2O. (A) PEI-Arg, (B) PEI-Arg-mPEG, (C) PEI-Arg-mPEG-S-S-mPEG-Arg-PEI (PAPS).

Fig. S2.

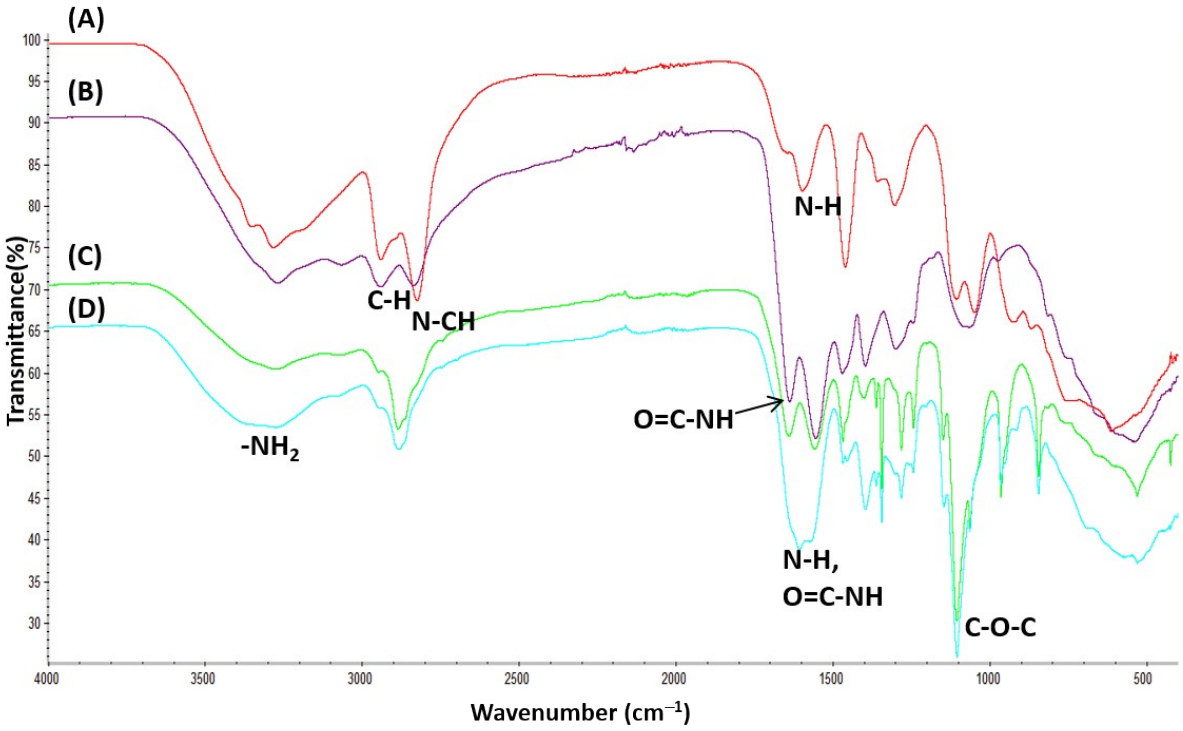


Fig. S2. ATR-FTIR spectra of samples (A) PEI1.8kDa, (B) PEI-Arg, (C) PEI-Arg-mPEG, (D) PEI-Arg-mPEG-S-S-mPEG-Arg-PEI (PAPS).

Fig. S3.

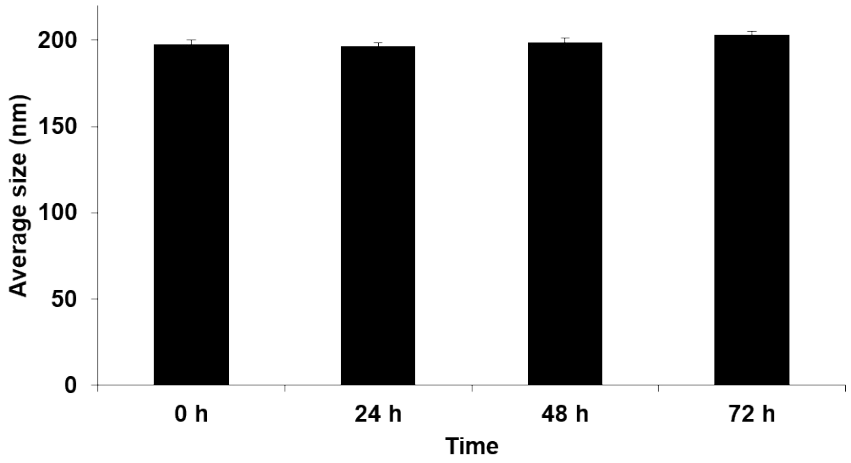


Fig. S3. Stability assay of Ad/PAPS complex in PBS at room temperature. The size of Ad/PAPS complex was measured at different time intervals by DLS.

Fig. S4.

A.

B.

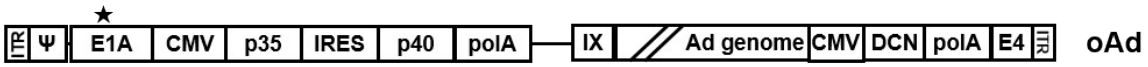


Fig. S4. Schematic representation of adenovirus genomic structures. (A) Genomic structure of replication-incompetent Ad expressing GFP from Ad E1 region (dAd). (B) Genomic structure of oncolytic Ad co-expressing DCN and IL-12 (oAd).