

Development of a peptide-siRNA nanocomplex targeting NF- κ B for efficient cartilage delivery

Huimin Yan¹, Xin Duan², Hua Pan³, Antonina Akk¹, Linda J. Sandell², Samuel A. Wickline³, Muhammad Farooq Rai^{2,4}, and Christine T.N. Pham^{1,5,*}

¹Department of Medicine, Washington University School of Medicine, St. Louis, MO

²Department of Orthopaedic Surgery, Washington University School of Medicine, St. Louis, MO

³Department of Cardiovascular Sciences, University of South Florida Health Heart Institute, Morsani School of Medicine, Tampa, FL

⁴Department of Cell Biology & Physiology, Washington University School of Medicine, St. Louis, MO

⁵Department of Pathology and Immunology, Washington University School of Medicine, St. Louis, MO

*Address correspondence to: Christine Pham, Washington University School of Medicine, 660 South Euclid Avenue, Box 8045, Saint Louis, MO 63110, USA. Phone: 314.362.9043; Fax: 314.454.1091; Email: cpham@wustl.edu

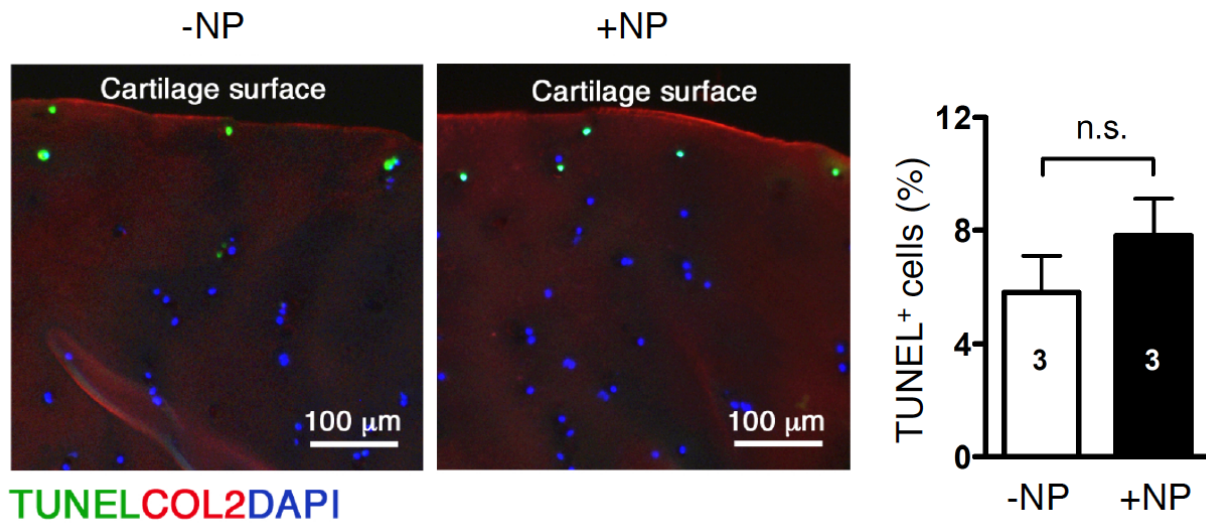


Figure S1. P5RHH-p65 siRNA NP does not negatively affect chondrocyte viability at the cartilage surface. Human cartilage explants were incubated in culture medium without or with p5RHH-p65 siRNA NP for 48 h. Excess NP was washed off and cartilage sections were examined for cell viability using TUNEL staining (green). Exposure to NP did not significantly affect cell viability. COL2 (red), type II collagen; DAPI (blue) stained nuclei. N = 3 explants per treatment type.

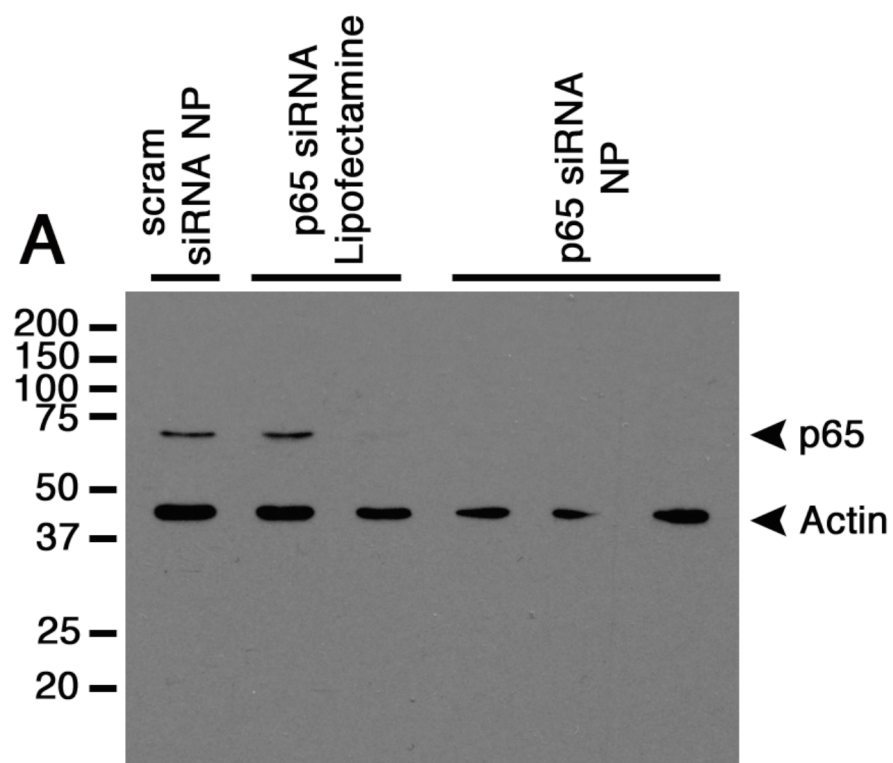


Figure 1A. Uncut gel