

Supplementary Materials

Inhibition of osteosarcoma by European Mistletoe derived val-miR218

Wenyan Xie^{1,*}, Catharina Delebinski², Dennis Gürgen³, Maik Schröder², Georg Seifert^{2,#}, Matthias F. Melzig^{1,#}

¹Institute of Pharmacy, Freie Universität Berlin, Berlin 14195, Germany.

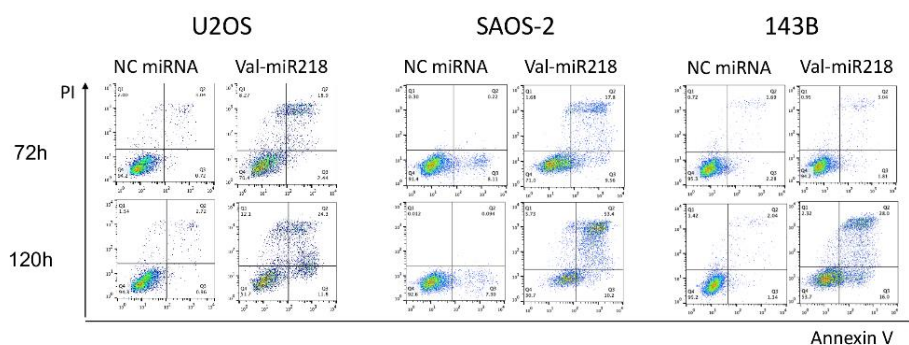
²Department of Pediatric Oncology/Hematology, Otto-Heubner-Centre for Pediatric and Adolescent Medicine (OHC), Charité – Universitätsmedizin Berlin, corporate member of Freie Universität Berlin and Humboldt Universität zu Berlin, Berlin 13353, Germany.

³EPO GmbH Berlin, Berlin 13353, Germany.

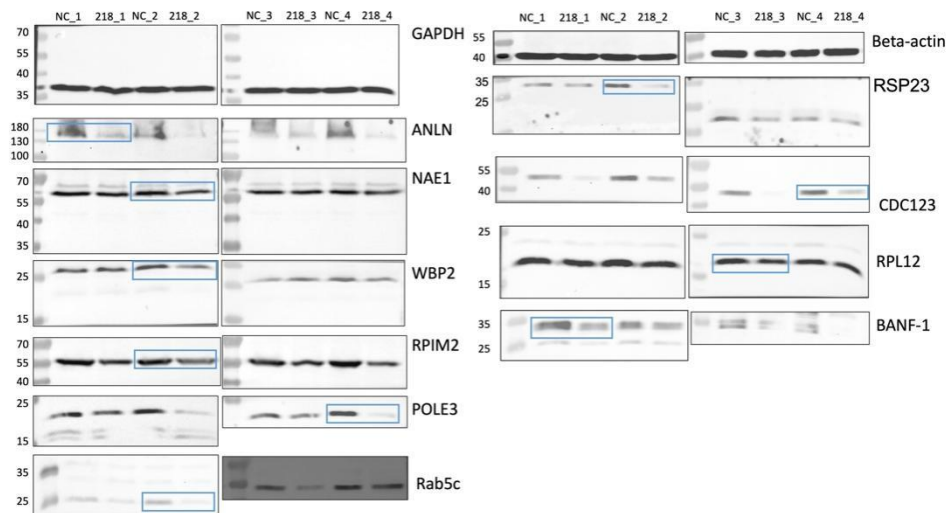
#Authors contributed equally.

*Correspondence to: Dr. Wenyan Xie, Institute of Pharmacy, Freie Universität Berlin, Königin-Luise-Str. 2+4, 14195 Berlin, Germany. E-mail: xiewenyanyan@yahoo.com

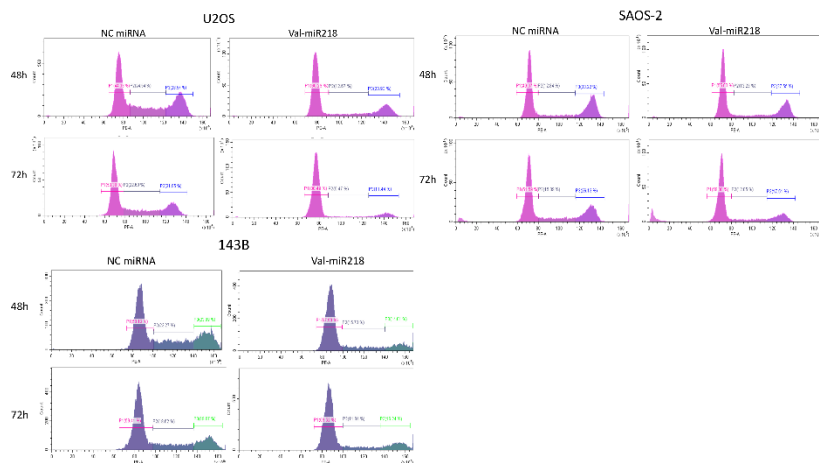
ORCID: Wenyan Xie (0000-0001-6898-3216)



Supplementary Figure 1. FACS analysis of cell apoptosis.

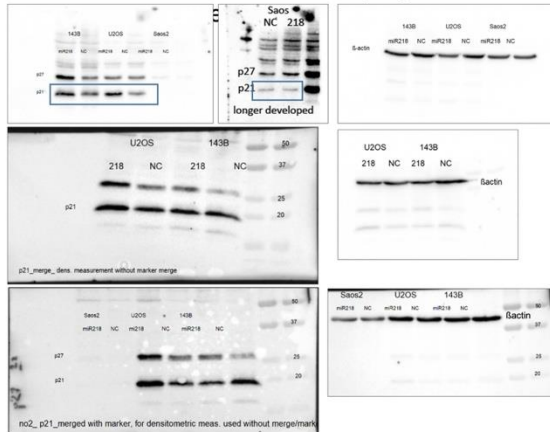


Supplementary Figure 2. Western blot images of U2OS cells transfected with val-miR218 or NC miRNA. The blots in blue frame are also present in Figure 4.

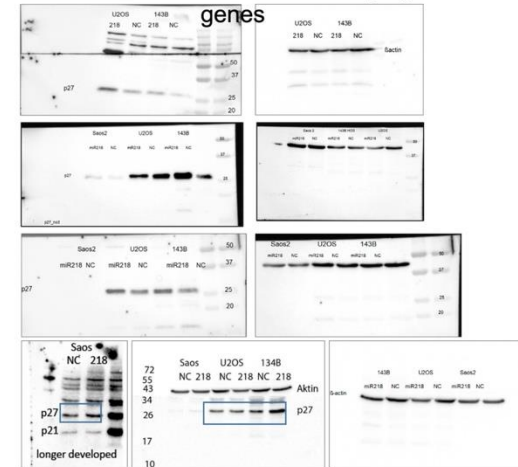


Supplementary Figure 3. FACS analysis of cell cycle.

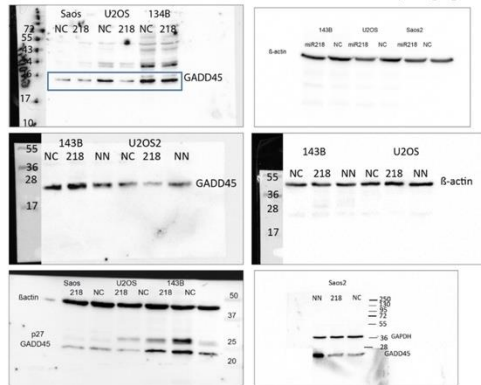
A P21 and associated housekeeping



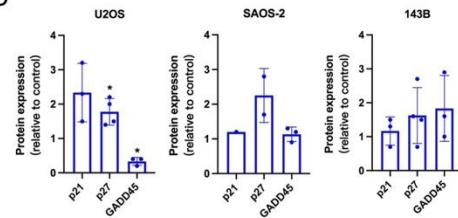
B P27 and associated housekeeping genes



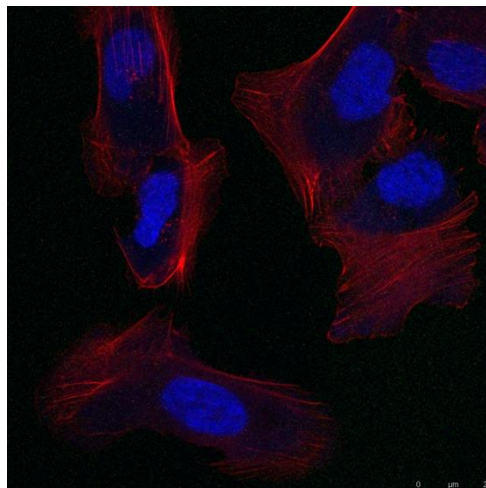
C GADD45 and associated housekeeping genes



D



Supplementary Figure 4. Western blot images of P21 (A), P27 (B) GADD45 (C) and their relative density (D) in U2OS, 143B and SAOS-2 cells transfected with val-miR218 or NC miRNA. The experiments were conducted at least 3 times. The blots in blue frame are also present in Figure 5.



Supplementary Figure 5. Naked FAM-labeled val-miR218 was incubated with U2OS cells for 24 h. The uptake of FAM-labeled val-miR218 by U2OS was checked under a confocal microscope. The cell nucleus was stained by Hoechst 33342, and the cell skeleton was stained by phalloidin.