



SUPPLEMENTARY MATERIAL

DOI: [10.4081/ejh.2025.4178](https://doi.org/10.4081/ejh.2025.4178)

Knockdown of miR-411-3p induces M2 macrophage polarization and promotes colorectal cancer progression by regulation of MMP7

Tianliang Bai,^{1#} Ping Li,^{1#} Yabin Liu,² Bindan Cai,³ Gang Li,¹ Wenbin Wang,¹ Rui Yan,¹ Xiangkui Zheng,¹ Shangkun Du¹

¹Department of Gastrointestinal Surgery, Affiliated Hospital of Hebei University, Baoding, Hebei Province

²Department of General Surgery, Fourth Hospital of Hebei Medical University, Hebei Province

³Department of Neurology, Zhuozhou City Hospital, Hebei Province, China

#These authors share first authorship as they equally contributed to this work.

Correspondence: Shangkun Du, Department of Gastrointestinal Surgery, Affiliated Hospital of Hebei University, 212 Yuhua East Road, Baoding 071000, Hebei Province, China. Email: ShangkunDuShang@hotmail.com

Key words: colorectal cancer; miR-411-3p; matrix metalloproteinase 7; M2 macrophage polarization.

Note: The publisher is not responsible for the content or functionality of any supporting information supplied by the authors. Any queries should be directed to the corresponding author for the article.

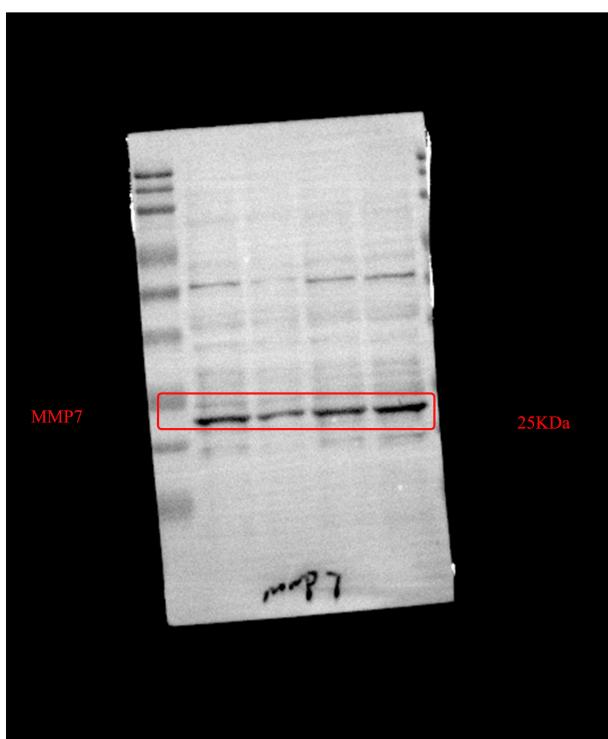
Materials and Methods

Integration of the sub-section “Statistical analysis”

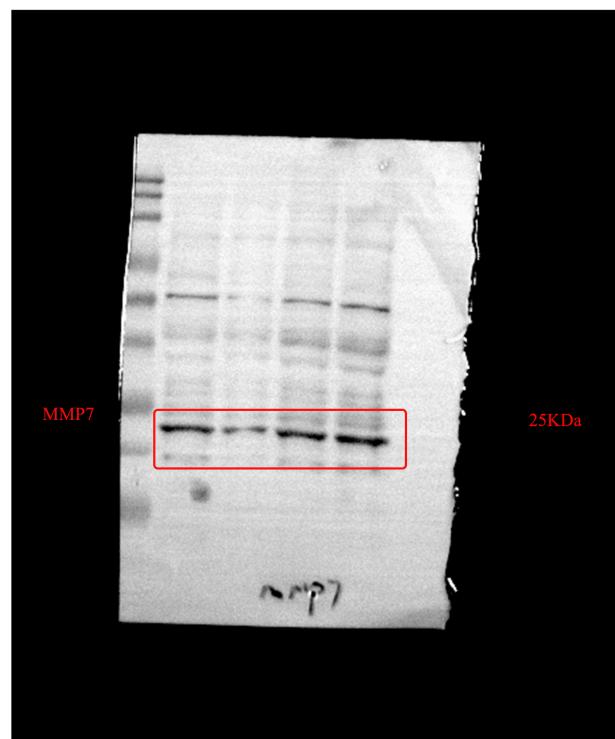
The data were first tested for normality (Shapiro-Wilk test) and for homogeneity of variance (Levene's test). If the data were normally distributed and variance aligned, a one-way ANOVA was used to test the overall difference between the group means. If the data did not satisfy normality or chi-square, the non-parametric Kruskal-Wallis test was used. When the overall difference was significant, if the data conformed to normal distribution and variance was homogeneous, Student's *t*-test was used for comparison between two groups, and Tukey's test was used for pairwise comparison between multiple groups; if the data were non-normal or variance was unequal, Mann-Whitney U test was used for comparison between two groups, and Dunn's test was used for pairwise comparison between multiple groups.

It is worth noting that Figure 4F was automatically presented in the GEPIA database, was retrievable, and did not use the statistical analysis methods described above.

SW480



HCT116



Original Western blots for panel E in Figure 4.