

Supplementary Materials

An epithelial-mesenchymal transition-related gene signature predicts prognosis, immune infiltration, and drug sensitivity in colorectal cancer

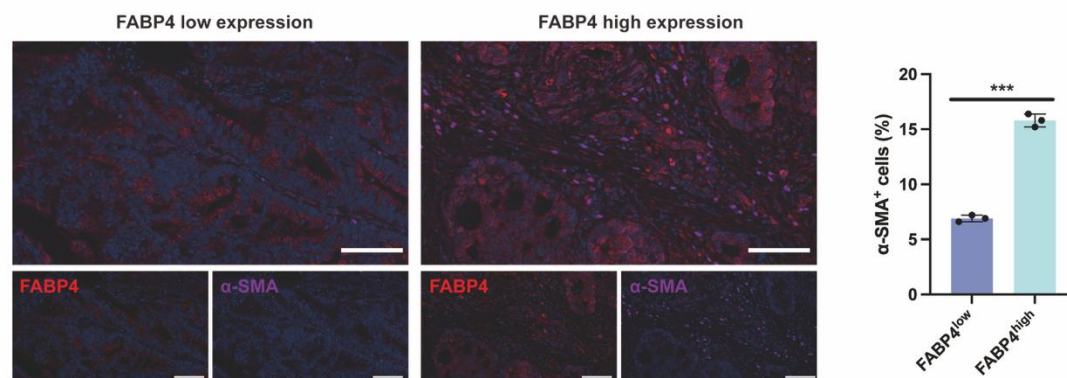
Xiaonan Shen^{1,#}, Hao Zhong^{2,#}, Wenqing Jia^{2,#}, Zichao Guo², Haiqin Song², Zhenghao Cai², Xi Cheng², Jianwen Li², Bo Feng², Haoran Feng², Fei Yue²

¹Department of Gastroenterology, Ruijin Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai 200025, China.

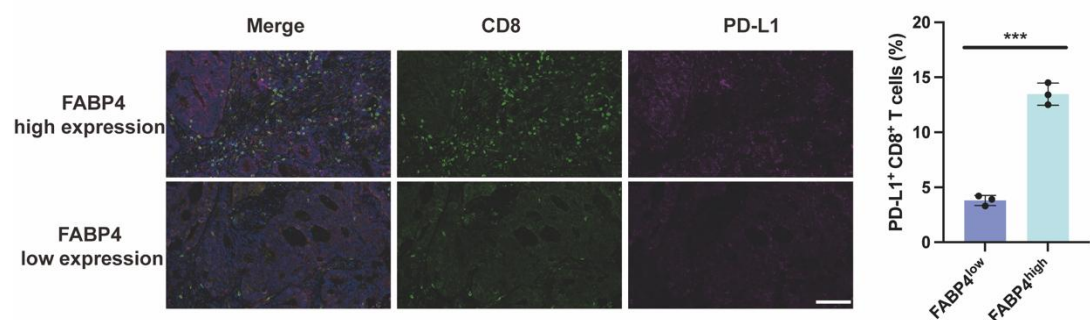
²Department of General Surgery, Ruijin Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai 200025, China.

[#]Authors contributed equally.

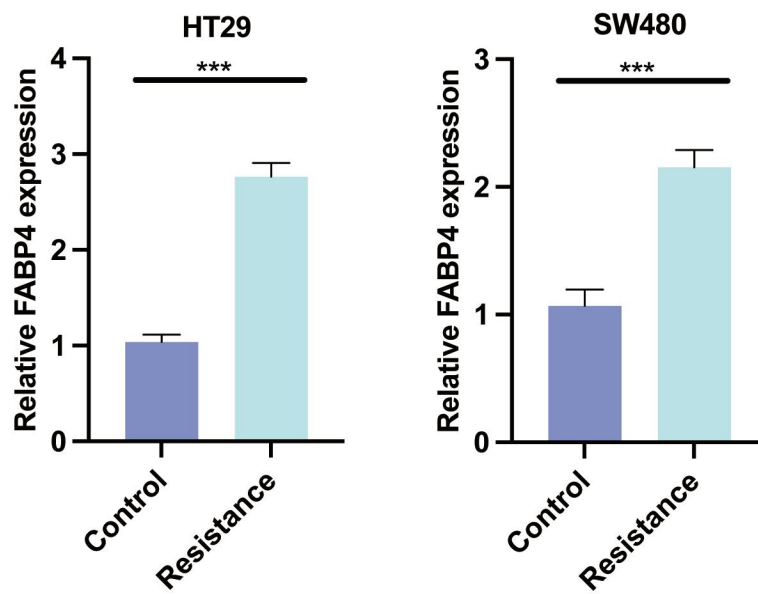
Correspondence to: Dr. Jianwen Li, Dr. Bo Feng, Dr. Haoran Feng, Dr. Fei Yue, Department of General Surgery, Ruijin Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai 200025, China. E-mail: ljw10499@rjh.com.cn; fb11427@rjh.com.cn; fhr01K33@rjh.com.cn; yuefei@shsmu.edu.cn



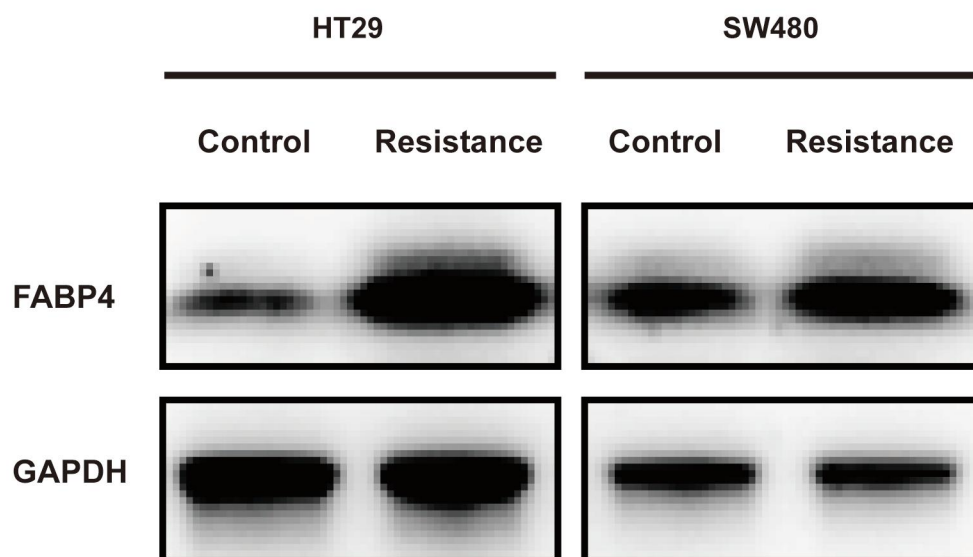
Supplementary Figure 1. Representative images of multiplex immunofluorescence in FABP4-low and FABP4-high human CRC tissues. Three representative patient samples per group were analyzed, with three sections per sample examined as technical replicates. Scale bar = 0.1 mm. Quantification of α-SMA⁺ cells as a proportion of total cells. *p < 0.05, **p < 0.01, and ***p < 0.001.



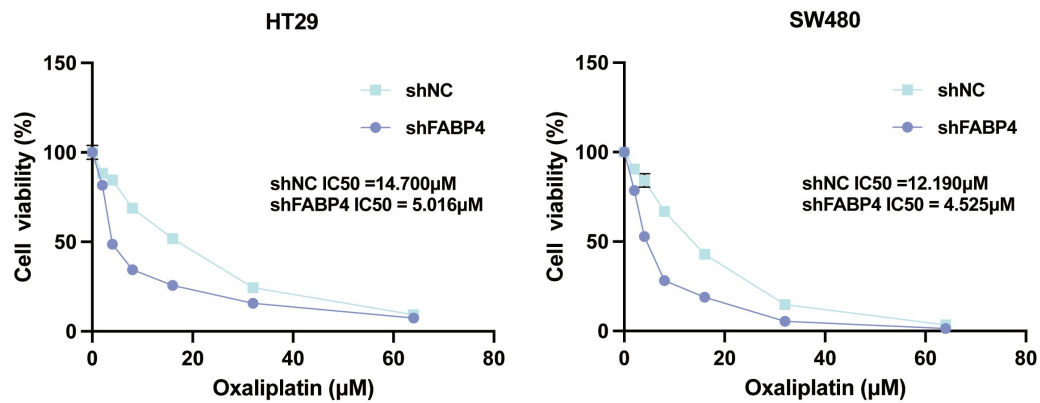
Supplementary Figure 2. The correlations between FABP4 expression and PD-L1⁺ CD8⁺ T cells were analyzed by immunofluorescence. Three representative patient samples per group were analyzed, with three sections per sample examined as technical replicates. Scale bar = 0.1 mm. *p < 0.05, **p < 0.01, and ***p < 0.001.



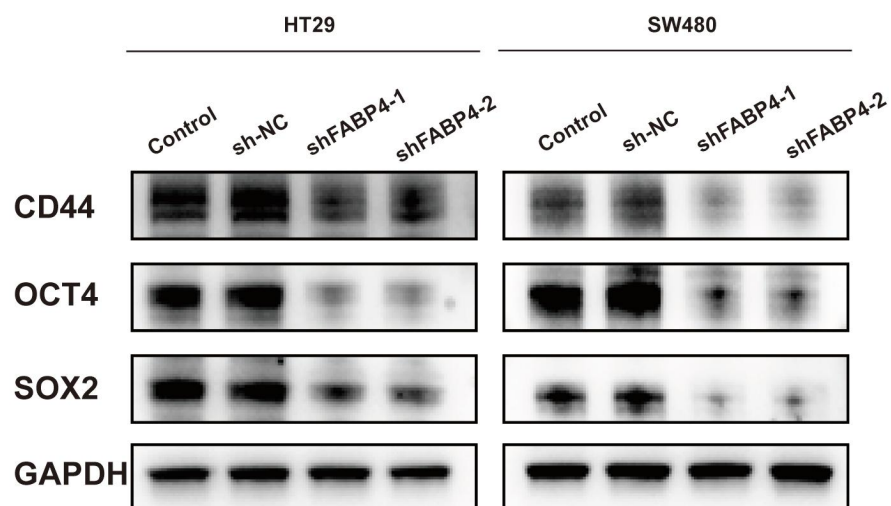
Supplementary Figure 3. The mRNA level of FABP4 in drug-resistant cell lines and control cells.



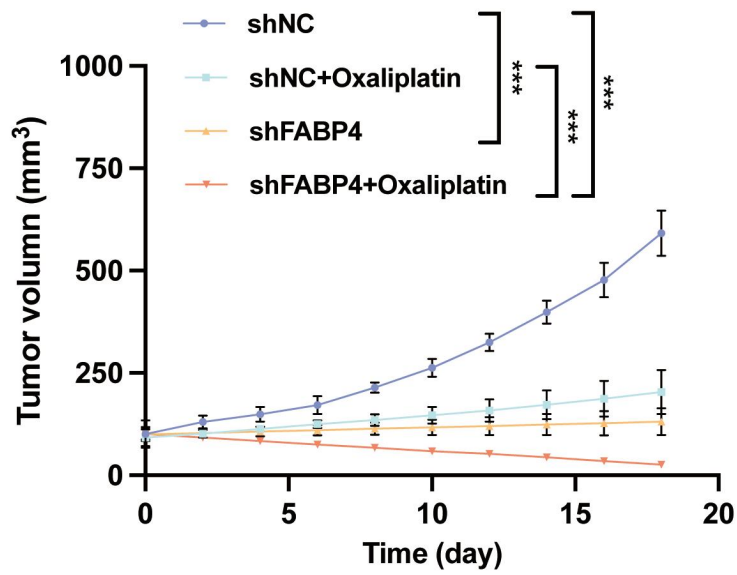
Supplementary Figure 4. The protein level of FABP4 in drug-resistant cell lines and control cells.



Supplementary Figure 5. FABP4 knockdown increased the sensitivity to oxaliplatin in drug-resistant cell lines.



Supplementary Figure 6. Western blot analysis of stemness-related proteins (CD44, OCT4, SOX2) in drug-resistant cell lines.



Supplementary Figure 7. Average tumor growth curves of different groups (n=5). Statistical significance was determined by two-way repeated-measures ANOVA. * indicates $p < 0.05$, ** indicates $p < 0.01$, and *** indicates $p < 0.001$.

Supplementary Table 1. IC₅₀ values of oxaliplatin in HT29, SW480, and their oxaliplatin-resistant derivatives

Cell lines	IC ₅₀ (μM)
HT29	2.254
HT29/OXR	14.925
SW480	1.394
SW480/OXR	12.872

Supplementary Table 2. Primer sequences of model-related genes

Gene	Primer sequence
FABP4	F: ACTGGGCCAGGAATTTGACG R: CTCGTGGAAGTGACGCCTT
ADH1B	F: AGGGGGCTGTTTATGGTGG R: GGTACGGATACTTTTCCCAGAGT
MDFIC	F: CCACACAGGTCTGAGCAATGG R: AACAAAGCAAGCCAGGATACAG
NOX1	F: CTGCTTCCTGTGTGTCGCAA R: AGGCAGATCATATAGGCCACC
GRP	F: AAAGAGCACAGGGGAGTCTTC R: TCCTTTGCTTCTATGAGACCCA
CCL19	F: TACATCGTGAGGAACTTCCACT R: CTGGATGATGCGTTCTACCCA
CALB2	F: ACTTTGACGCAGACGGAAATG R: GAAGTTCTCTTCGGTTGGCAG
LRP4	F: ACCTACCTGTTCCCCTCTTGA R: GTCCTGCTCATCCGAGTCATC

Supplementary Table 3. List of primary antibodies used in this study

Antibodies	Source	Cat. No.	Lot No.	Dilution ratio
FABP4	Proteintech	12802-1-AP	00160325	1:1000
CD44	Proteintech	15675-1-AP	00173417	1:1000
OCT4	Proteintech	11263-1-AP	00195078	1:1000
SOX2	Proteintech	11064-1-AP	00144863	1:1000
GAPDH	Proteintech	60004-1-Ig	00122627	1:1000