

## *Supplementary Materials*

### **Grid2 interacting protein is a potential biomarker related to immune infiltration in colorectal cancer**

**Jiajing Zhao<sup>1,†</sup>, Jiazheng Quan<sup>2,†</sup>, Weilin Chen<sup>2,\*</sup> & Xiaojun Xie<sup>1,\*</sup>**

<sup>1</sup>Department of General Surgery, the First Affiliated Hospital of Shantou University Medicine College, Shantou, 515000, China

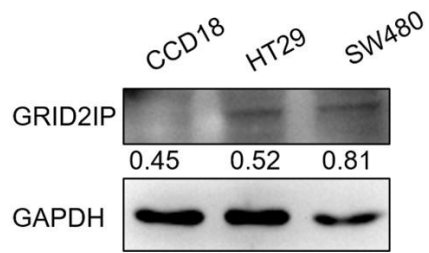
<sup>2</sup>Marshall Laboratory of Biomedical Engineering, Institute of Biological Therapy, Shenzhen University Medical School, Shenzhen University, Shenzhen, 518055, China

\*Corresponding author: Prof. Weilin Chen, Tel: 86-0755-26910334. Fax:86-0755-26910334. E-mail: cwl@szu.edu.cn.

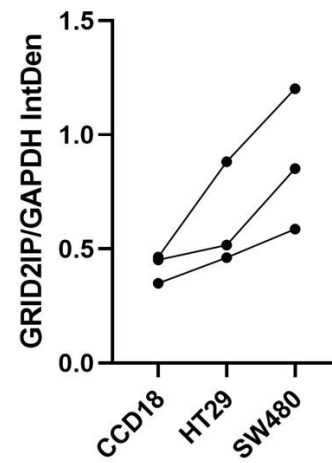
\*Corresponding author: Prof. Xiaojun Xie, E-mail: xjxie79@163.com

† These authors contributed equally to this project.

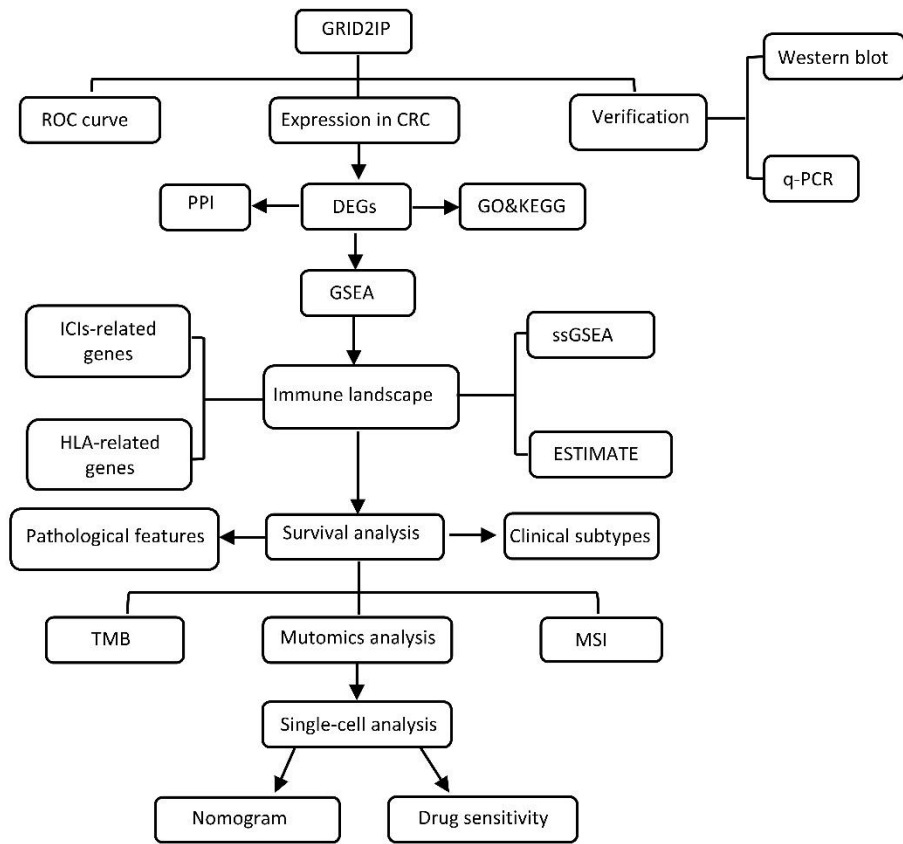
A



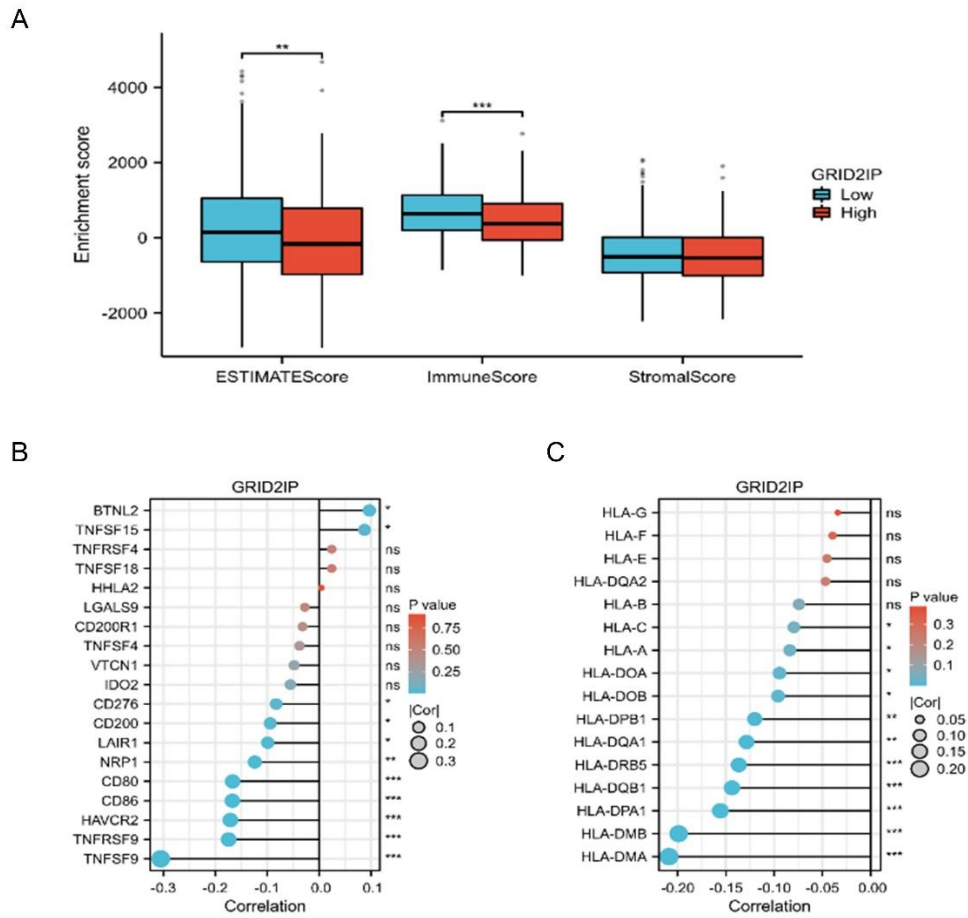
B



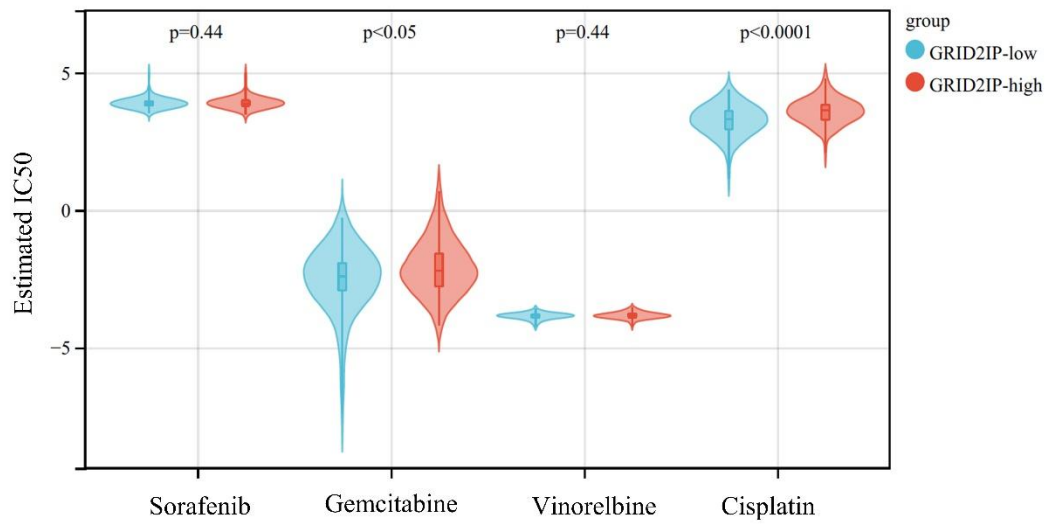
**Fig. S1** GRID2IP protein expression in CCD18, HT19 and SW480 cells. **A** Western Blotting of GRID2IP in CCD18, HT19, and SW480 cells. **B** Gray-scale calculation of GRID2IP Western Blotting in CCD18, HT19, and SW480 cells



**Fig. S2** Complete experimental flow chart.



**Fig. S3** Correlation between GRID2IP and TME, immune checkpoint inhibitor-related genes and HLA related genes. **A** Relationship between GRID2IP and alterations in the immune landscape. **B** Lollipop plot of correlation between GRID2IP and immune checkpoint inhibitors related genes. **C** Lollipop plot of correlation between GRID2IP and HLA related genes. \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ .



**Fig. S4** Different anti-cancer drug sensitivities in GRID2IP subgroups.