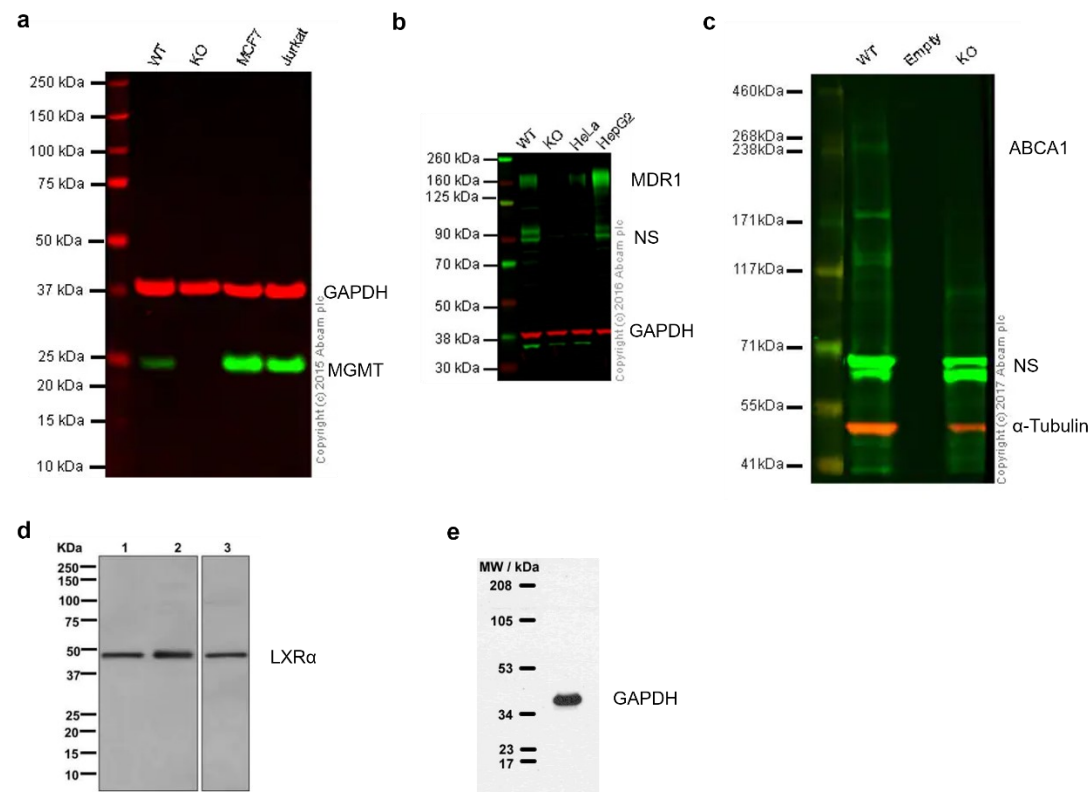


**Cholesterol Analogs Ginsenosides Rg1 and Compound K Control Temozolomide Resistance in Glioblastoma Cells by Regulating Cholesterol Efflux and Lipid Raft Distribution**  
**- Supplementary Information -**

Runze Qiu, Jingjing Zhang, Chun Ge, Yue Zhong, Qingquan Li, Yingbin Li, Hongwei Fan \*

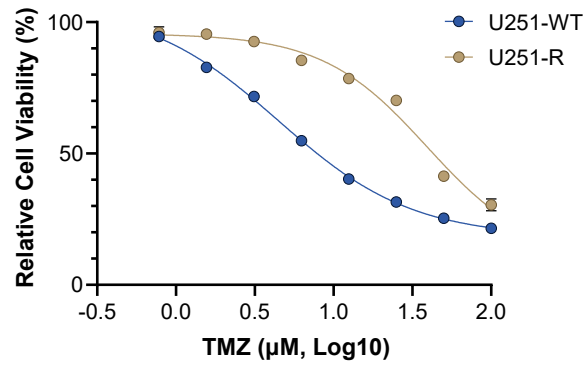
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**Supplementary Fig. 1** Validation of antibodies used in this study, including gene knockout validation of **a** rabbit monoclonal to MGMT (#ab108630), **b** rabbit monoclonal to MDR1 (ab168337) and **c** mouse monoclonal to ABCA1 (ab66217), and non-knockout validation of **d** rabbit monoclonal to LXRα (ab176323) and **e** mouse monoclonal to GAPDH (ab8245). The above results are provided by the official website of abcam (<https://www.abcam.com/>), the manufacturer of the antibodies. WT, wild-type cells; KO, knockout cells, NS, nonspecific binding

**Supplementary Table 1** Validation information for antibodies used in this study

| Target | Cat No.  | Link to Results of Validation                                                                                                                         |
|--------|----------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| MGMT   | ab108630 | <a href="https://www.abcam.cn/mgmt-antibody-epr4397-ab108630.html">https://www.abcam.cn/mgmt-antibody-epr4397-ab108630.html</a>                       |
| MDR1   | ab168337 | <a href="https://www.abcam.cn/p-glycoprotein-antibody-epr10364-ab168337.html">https://www.abcam.cn/p-glycoprotein-antibody-epr10364-ab168337.html</a> |
| ABCA1  | ab66217  | <a href="https://www.abcam.cn/abca1-antibody-hj1-ab66217.html">https://www.abcam.cn/abca1-antibody-hj1-ab66217.html</a>                               |
| LXRα   | ab176323 | <a href="https://www.abcam.cn/lxr-alpha-antibody-epr6508n-ab176323.html">https://www.abcam.cn/lxr-alpha-antibody-epr6508n-ab176323.html</a>           |
| GAPDH  | ab8245   | <a href="https://www.abcam.cn/gapdh-antibody-6c5-loading-control-ab8245.html">https://www.abcam.cn/gapdh-antibody-6c5-loading-control-ab8245.html</a> |

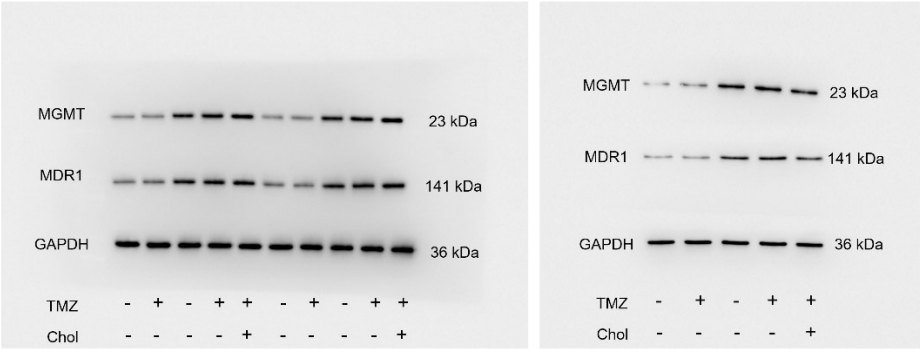


**Supplementary Fig. 2** The dose-viability curves of wild-type U251 (U251-WT) and temozolomide (TMZ)-resistant U251 (U251-R) cells treated with TMZ. The dots indicate the mean value of cell viability at each dose, and the error bars indicate SD

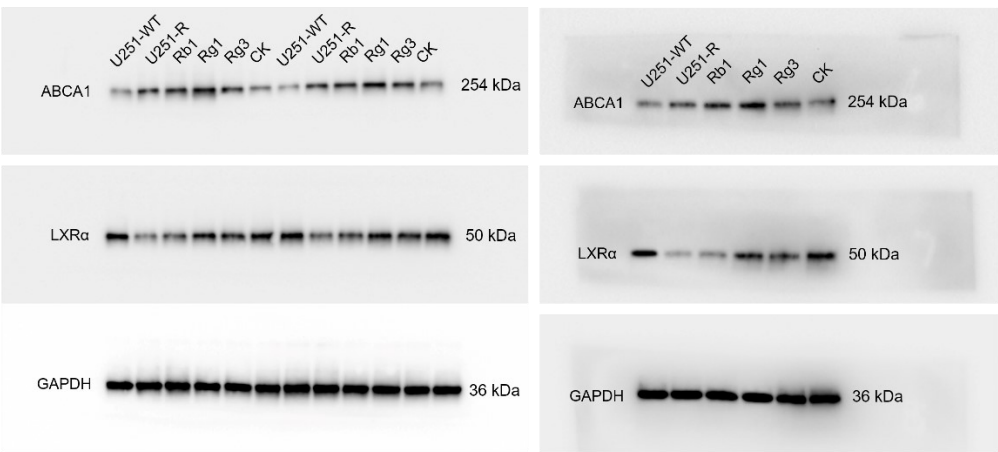
**Supplementary Table 2** The  $IC_{50}$  of TMZ to TMZ-resistant (U251-R) and wild-type U251 (U251-WT) cells, and the resistant index

| Cell    | $IC_{50}$ ( $\mu$ M) | Resistant Index |
|---------|----------------------|-----------------|
| U251-WT | 4.473                | 8.784           |
| U251-R  | 39.29                |                 |

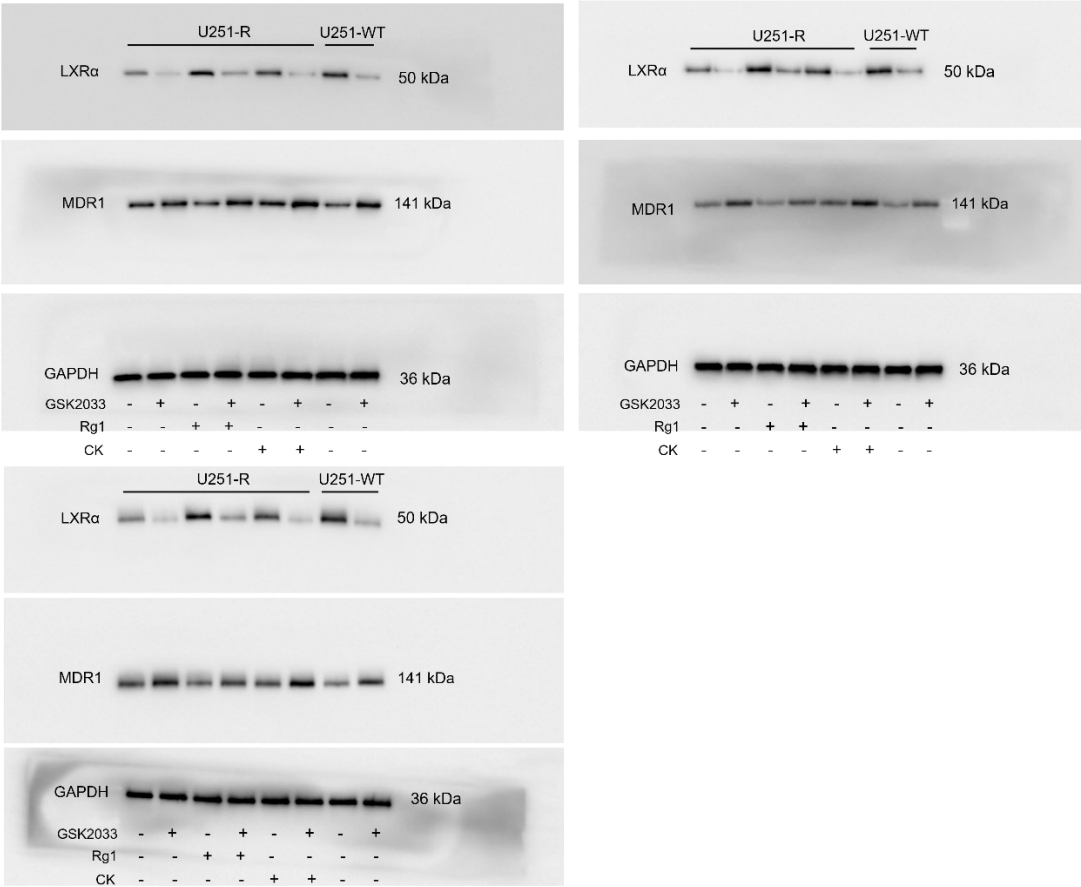
**a**



**b**



**c**



**Supplementary Fig. 3** Integral images of the immunoblot bands used in the main text. **a** The protein expression of MGMT, MDR1 and GAPDH during treatment of temozolomide (TMZ) and cholesterol (Chol). **b** The protein expression of LXR $\alpha$ , ABCA1 and GAPDH during treatment of ginsenosides in the presence of cholesterol. **c** The protein expression of LXR $\alpha$ , MDR1 and GAPDH during treatment of Rg1 and CK in the presence of absence of GSK2033 in cholesterol-containing medium. U251-WT, wild-type U251 cells, U251-R, TMZ-resistant U251 cells