# Supplementary Information for High Expression of G9a Induces Cisplatin Resistance in Hepatocellular Carcinoma 

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Fig.S1: Analysis of the correlation between G9a and hepatocellular carcinoma (HCC) through the public tumor databases. A. Analyzing diversity in expression level of G9a (also known as EHMT2) between the normal people and liver cancer patients through the UALCAN tumor database. B. Analyzing relationship between G9a expression level and liver cancer staging through the UALCAN tumor database. C. Analyzing relationship between G9a expression level and overall survival and D. Disease-free survival of liver cancer patients through the GEPIA2 tumor database.

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Fig.S2. Western blot analysis of G9a and H3K9me2 protein levels in HuH7 and SNU387 cells treated with BIX-01294.

A

| Some of the targets of Degrasyn |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| USP5 | USP9x | USP14 | USP37 | UCH-L1 |

B

| Some of the targets of PR-619 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| USP1 | USP2 | USP4 USP5 | 5 USP7 | USP8 | USP9x | USP10 | O USP14 | USP15 | USP16 | USP19 | USP20 |
| USP22 | USP24 | 4 USP28 U | USP47 | USP48 | BAP1 | YOD1 | ATXN3 | OTUD5 | JOSD2 | VCIP135 | UCHL3 |

C


Fig.S3: Preliminary identification of upstream regulatory factors of G9a in HuH7 cells. A. Targets of selective deubiquitinase inhibitor Degrasyn. Yellow indicates targets that overlap with PR-619. B. Representative targets of the broad-spectrum deubiquitinase inhibitor PR-619. Yellow indicates targets that overlap with Degrasyn. C. Western blot analysis of G9a protein levels in HuH7 cells treated with Degrasyn ( $0,5,10 \mu \mathrm{M}$ ) and PR-619 ( $0,5,10 \mu \mathrm{M}$ ) for 24 hours.


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