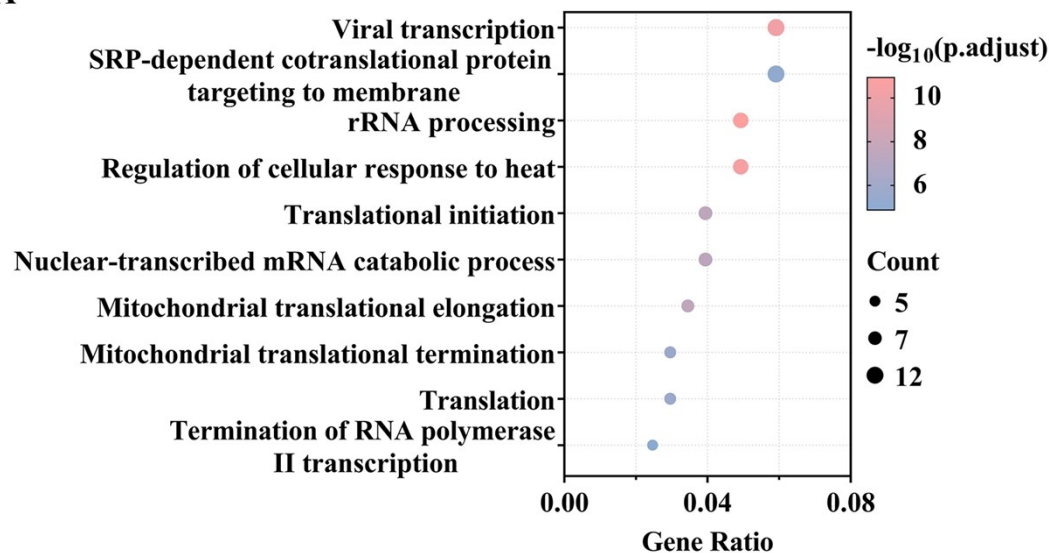


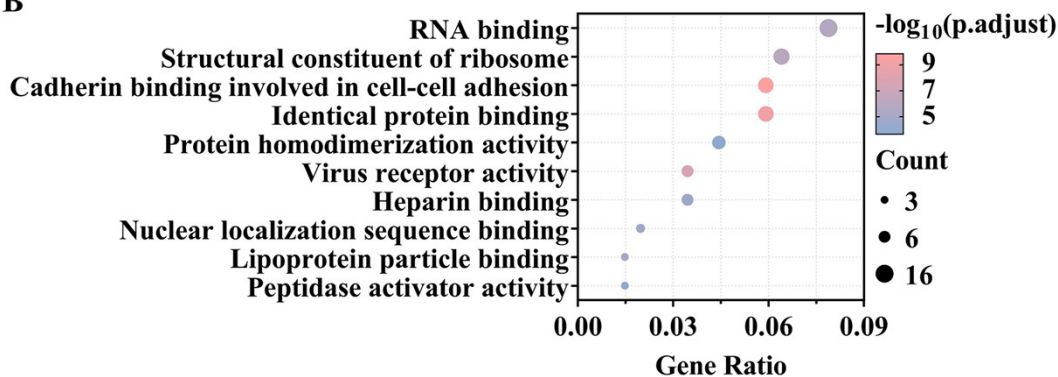
Supplementary Captions

Supplementary Figures

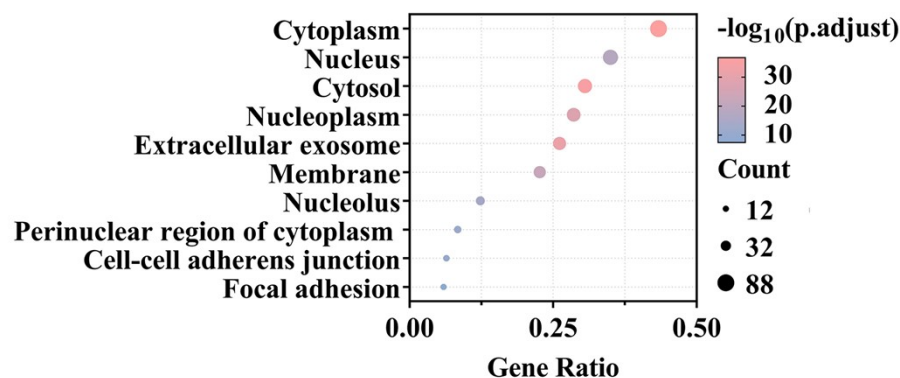
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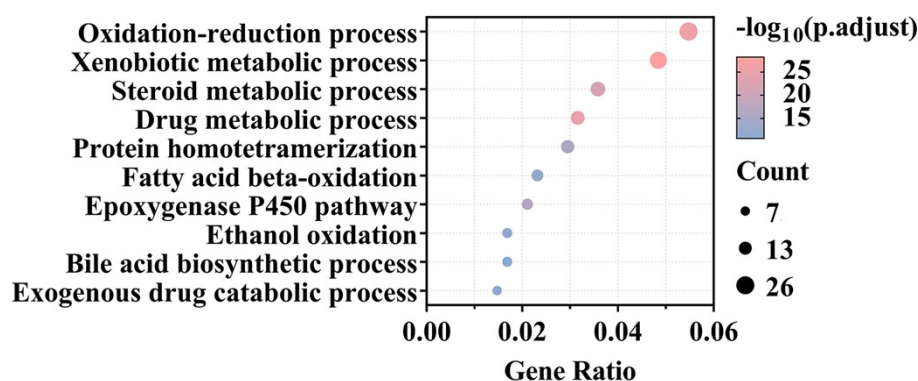
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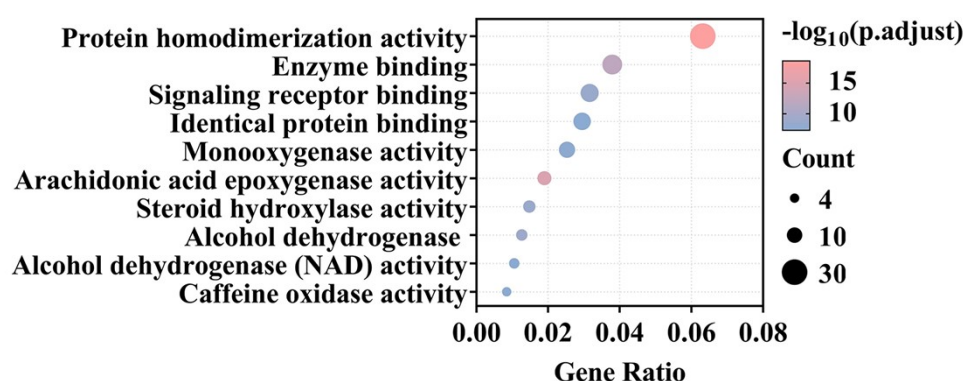
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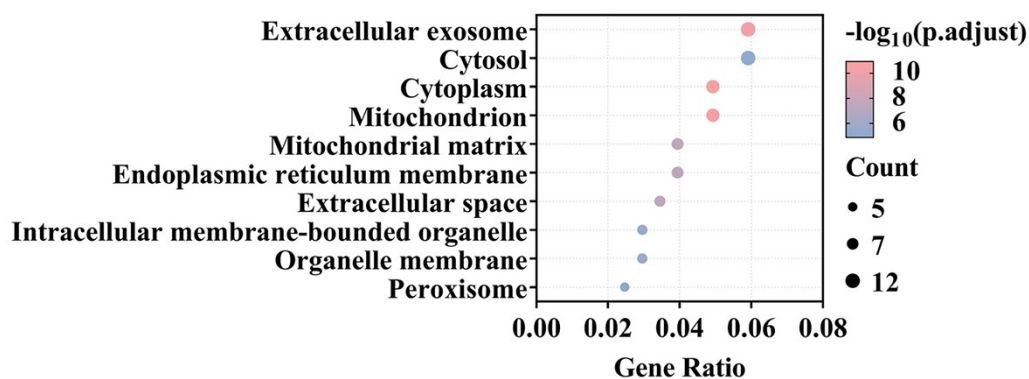
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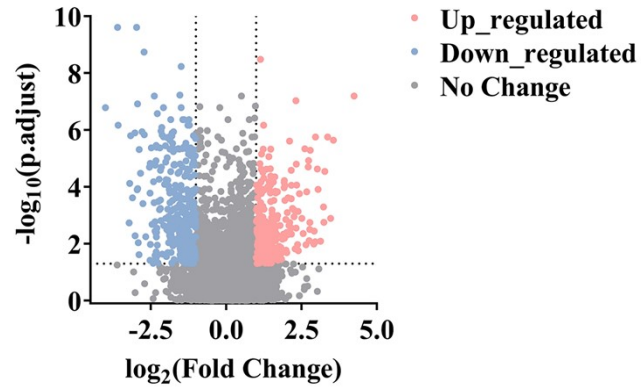


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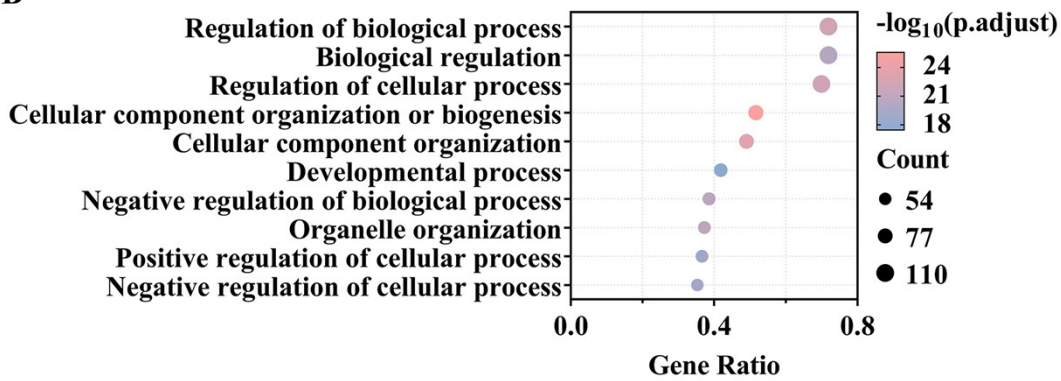


Supplementary Fig.1 The top ten significantly enriched GO terms (biological process, BP; molecular function, MF; and cellular component, CC) of upregulated and downregulated proteins. (A-C) BP, MF and CC of upregulated proteins; (D-F) BP, MF and CC of upregulated proteins.

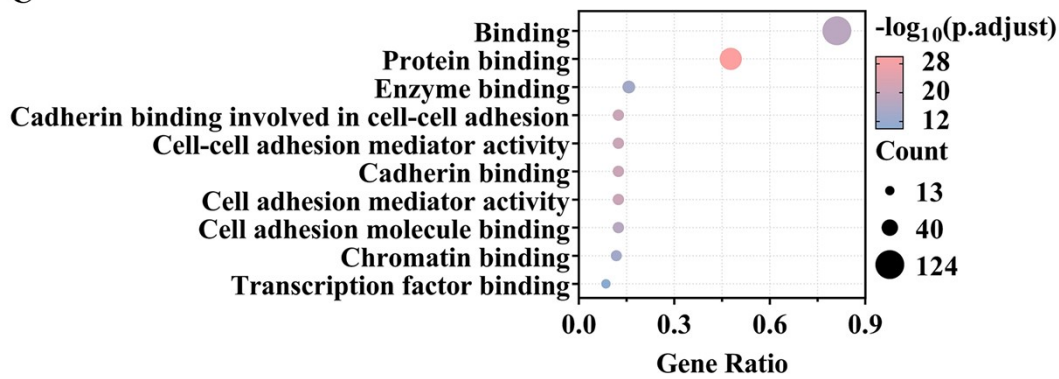
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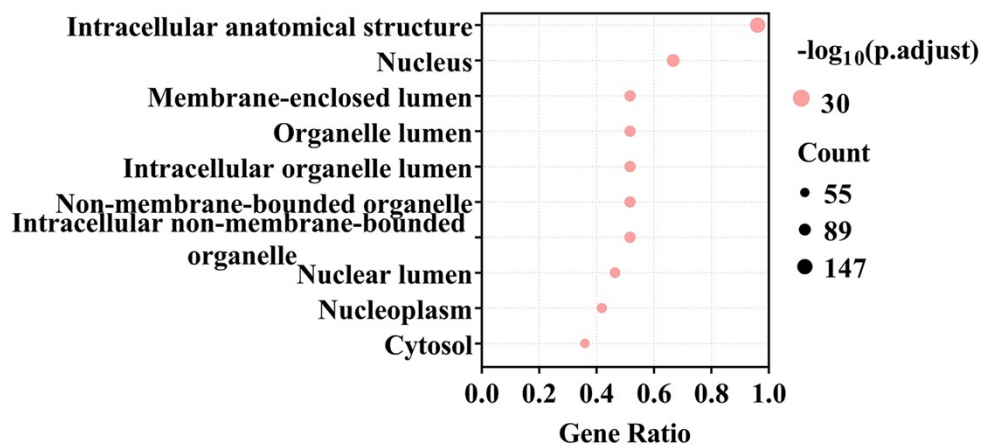
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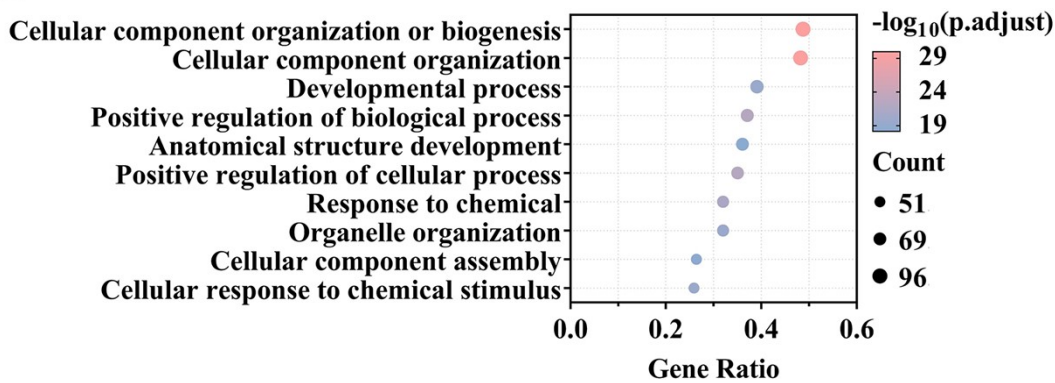
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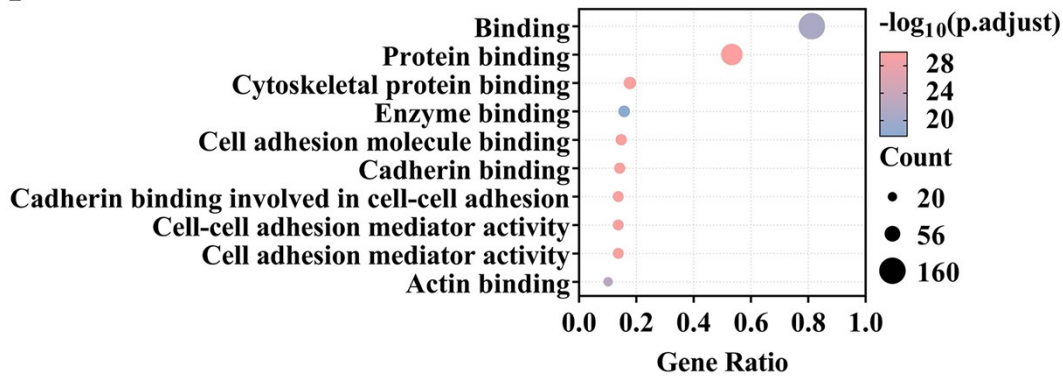
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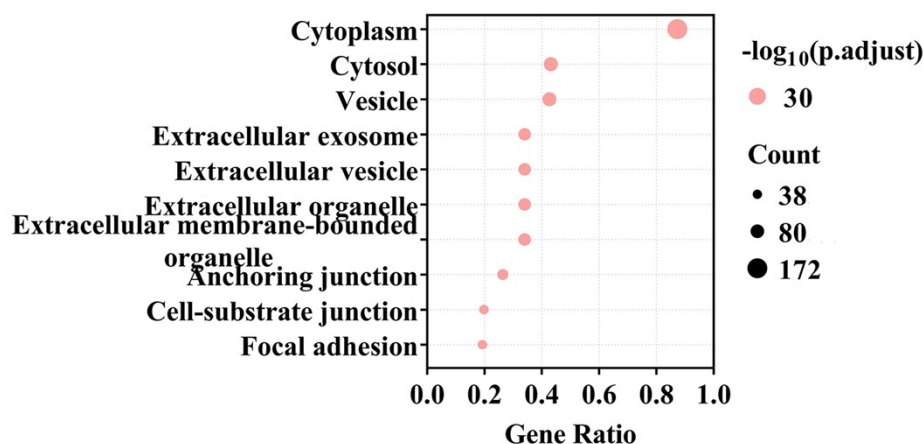
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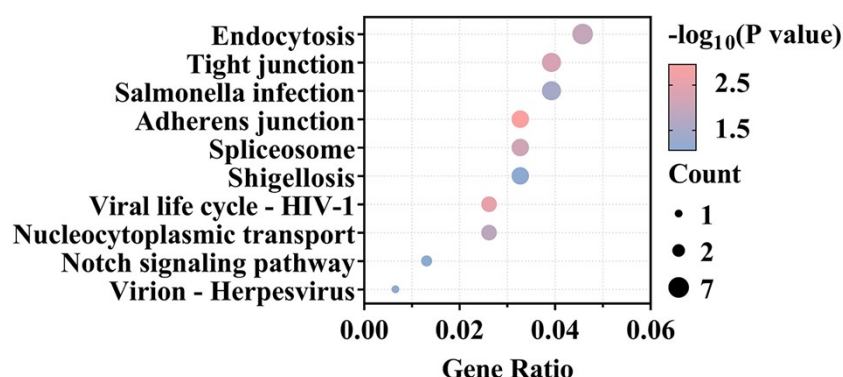
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G



H



Supplementary Fig.2 Information related to differential phosphopeptides correction and the top ten significantly enriched GO terms and KEGG pathways of upregulated phosphoproteins and the top ten significantly enriched GO terms of downregulated phosphoproteins. (A) Volcano plot showed the differential phosphopeptides corrected with corresponding protein abundance. Colours indicate upregulated (red), downregulated (blue) or no change (gray) phosphopeptides in HCC tumour tissues compared with non- tumour tissues. (B-D) The top ten significantly enriched GO terms (BP; MF, CC) of upregulated phosphoproteins. (E-G) The top ten significantly enriched GO terms (BP; MF, CC) of downregulated phosphoproteins. (H) Significantly enriched KEGG pathways of upregulated phosphoproteins.

Supplementary Tables

Supplementary Table 1 Clinical and virological characteristics of the 6 patients Clinical information

Supplementary Table 2 6472 differential identified proteins between HCC tumour and non-tumour tissues

Supplementary Table 3 6121 differential quantified proteins between HCC tumour and non-tumour tissues

Supplementary Table 4 Detailed information of unique proteins identified in HCC tumour tissues

Supplementary Table 5 Detailed information of unique proteins identified in adjacent non-tumour tissues

Supplementary Table 6 Up and down regulated proteins obtained by volcano analysis

Supplementary Table 7 GO analysis results of up-regulated proteins

Supplementary Table 8 GO analysis results of down-regulated proteins

Supplementary Table 9 KEGG pathways of up-regulated proteins

Supplementary Table 10 KEGG pathways of down-regulated proteins

Supplementary Table 11 Identified and quantified phosphopeptides, phosphosites and corresponding phosphoproteins in HCC tumour and adjacent non-tumour tissues

Supplementary Table 12 Up and down regulated phosphopeptides obtained by volcano analysis

Supplementary Table 13 Detailed information of differential phosphopeptides after correction with the abundance of corresponding proteins

Supplementary Table 14 Detailed information of differential phosphopeptides without the abundance of corresponding proteins

Supplementary Table 15 GO analysis results of up-regulated phosphoproteins in HCC tumour tissues compared with non- tumour tissues

Supplementary Table 16 GO analysis results of down-regulated phosphoproteins in HCC tumour tissues compared with non- tumour tissues

Supplementary Table 17 KEGG pathways analysis results of up-regulated phosphoproteins

Supplementary Table 18 KEGG pathways analysis results of down-regulated phosphoproteins