



# miR-3622b-5p regulates cisplatin resistance of human gastric cancer cell line by targeting BIRC5

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## Dual-luciferase reporter assay

The sequence of 3'-UTR of human BIRC5 cDNA containing the putative target site for the miR-3622b-5p; red stands for the putative target site for miR-3622b-5p:

AGCAGAAAATGCACTCCAGCCTCTGTACT  
CATCTAAGCTGCTTATTTTTGATATTTGTGT  
CAGTCTGTAAATGGATACTTCACTTAATA

ACTGTTGCTTAGTAATTGGCTTTGTAGAGA  
AGCTGGAAAAAATGGTTTTGTCTTCAACT  
CCTTTG**CATGCC**AGGCGGTGATGTGGATCT  
CGGCTTCTGTGAGCCTGTGCTGTGGGCAG  
GGCTGAGCTGGAGCCGCCCTCTCAGCCC  
GCCTGCCACGGCCTTTCCTTAAAGGCCATC  
CTTAAACCAGACCCTCATGGCTACCAGCA  
CCTGAAAGCTTCCCTCGACATCTGTTAATAA  
AG

	Predicted consequential pairing of target region (top) and miRNA (bottom)
Position 1600-1606 of BIRC5 3'-UTR	5' ...UCUUCAACUCCUUUGCAUGCCAG...
Hsa-miR-3622b-5p	3' AGUGGACUGGAGGGUACGGA

**Supplementary Fig. 1** Computational analysis identified that BIRC5 may be a potential target of miR-3622b-5p, and the predicted binding sequences of BIRC5-3'-UTR and miR-3622b-5p were marked.

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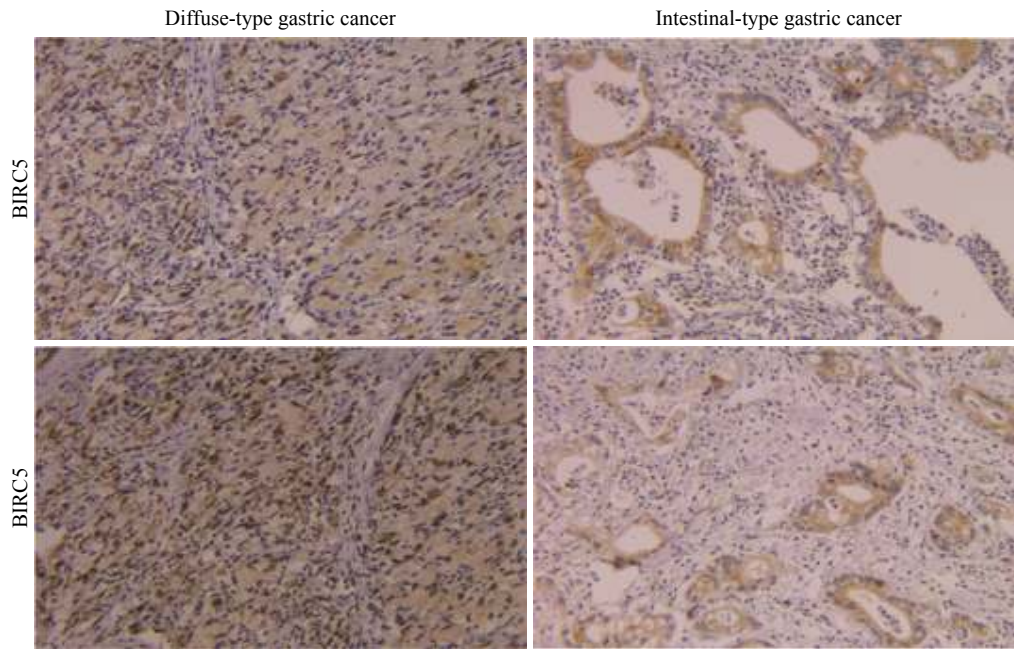
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**Supplementary Fig. 2** The expression of BIRC5 in tissue samples of 15 cases of gastric cancer was examined by immunohistochemistry. Immunohistochemistry staining showed that BIRC5 was significantly high expressed in 4 samples, including 2 diffuse-type gastric cancer tissues and 2 intestinal-type gastric cancer tissues, with the positive rate of 26.7% (4/15). Original magnification  $\times 200$ .