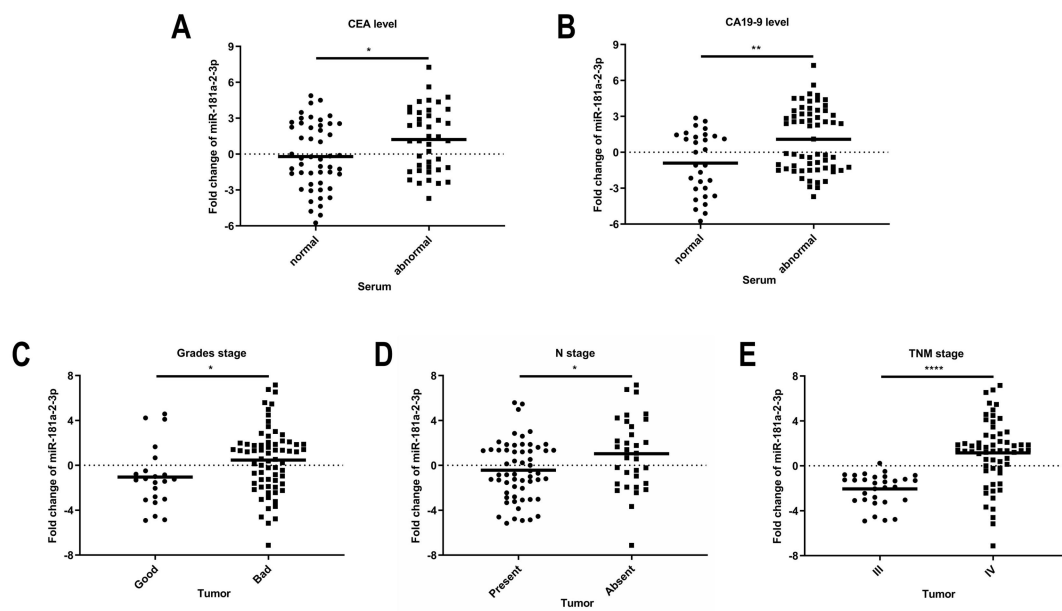


Supplementary Figure 1



Expression levels of miR-181a-2-3p in different human gastric cancer clinicopathological characteristics. (**A** and **B**) miR-181a-2-3p expression was obviously increased in abnormal CEA level ($P=0.0200$)(**A**) and abnormal CA19-9 level ($P=0.0015$)(**B**) in GC serum specimens. (**C-E**) miR-181a-2-3p expression was obviously increased in worse Grades stage (G3+G4, $P=0.0184$)(**C**), present lymph node metastasis ($P=0.0280$)(**D**), and higher TNM stage (IV, $P<0.0001$)(**E**) in GC tumor samples.

Supplementary Table 1

Differentially expressed miRNAs in three datasets.

| SGC-7901/DDP vs. SGC-7901 | BGC-823/DDP vs. BGC-823 | MGC-803/DDP vs. MGC-803 |
|---------------------------|-------------------------|-------------------------|
| hsa-mir-744 | hsa-mir-99a | hsa-mir-124-3p |
| hsa-mir-1301 | hsa-mir-505 | hsa-mir-9-5p |
| hsa-mir-491 | hsa-mir-422a | hsa-mir-204-5p |
| hsa-mir-423-3p | hsa-mir-342-3p | hsa-mir-146a-5p |
| hsa-mir-455 | hsa-mir-345 | hsa-mir-129-5p |
| hsa-mir-324-3p | hsa-mir-421 | hsa-mir-127-3p |
| hsa-mir-1296 | hsa-mir-125b-2-5p | hsa-mir-211-5p |
| hsa-mir-505 | hsa-mir-149 | hsa-mir-486-5p |
| hsa-mir-874 | hsa-mir-1301 | hsa-mir-9-3p |
| ENSG00000238321 | hsa-mir-625 | hsa-mir-381-3p |
| hsa-mir-346 | hsa-mir-103-as | hsa-mir-3180 |
| hsa-mir-152 | hsa-mir-188 | hsa-mir-3180-3p |
| hsa-mir-212 | hsa-mir-491 | hsa-mir-370-3p |
| hsa-mir-320b | hsa-mir-452 | hsa-mir-135a-5p |
| hsa-mir-99b | hsa-mir-346 | hsa-mir-146b-5p |
| hsa-mir-125b-2-3p | hsa-mir-3200 | hsa-mir-522-5p |
| hsa-mir-320a | hsa-mir-1973 | hsa-mir-519b-5p |
| hsa-mir-99a | hsa-mir-378c | hsa-mir-519a-5p |
| hsa-mir-423-5p | hsa-mir-342-5p | hsa-mir-518e-5p |
| hsa-mir-324-5p | hsa-mir-378-3p | hsa-mir-523-5p |
| hsa-mir-200c | hsa-mir-210 | hsa-mir-519c-5p |
| hsa-mir-345 | hsa-mir-378-5p | hsa-mir-7977 |
| hsa-mir-582 | hsa-mir-193a | hsa-mir-543 |
| hsa-mir-1180 | ACA20 | hsa-mir-433-3p |
| hsa-mir-320c | hsa-mir-183 | hsa-mir-1244 |
| hsa-mir-23b | hsa-mir-663b | hsa-mir-486-3p |
| hsa-mir-3172 | hsa-mir-128 | hsa-mir-6724-5p |
| hsa-mir-99b-3p | hsa-mir-10a | hsa-mir-663a |
| hsa-mir-217 | hsa-mir-615 | hsa-mir-124-5p |
| hsa-mir-1307 | hsa-mir-28 | hsa-mir-382-5p |
| hsa-mir-769 | SNORD126 | hsa-mir-1306-3p |
| hsa-mir-138 | U83 | hsa-mir-1-3p |
| hsa-mir-22-3p | hsa-mir-455 | hsa-mir-1285-5p |
| hsa-mir-130b | hsa-mir-935-3p | hsa-mir-3913-5p |
| ACA57-3p | hsa-mir-151 | hsa-mir-181a-2-3p |
| hsa-mir-374a | hsa-mir-1910 | |
| hsa-mir-2110 | v49_ENSG00000201038 | |
| ACA57-5p | hsa-mir-221 | |
| U14A | hsa-mir-1246 | |
| ENSG00000238473 | hsa-mir-4286 | |

| | |
|-------------------|-------------------|
| hsa-mir-181a-2-3p | hsa-mir-20a |
| hsa-mir-181a | hsa-mir-503 |
| hsa-mir-424 | hsa-mir-3156 |
| hsa-mir-338 | hsa-mir-424 |
| hsa-mir-181b | hsa-mir-3147 |
| hsa-mir-181d | hsa-mir-886-3p |
| hsa-mir-29b-1-3p | hsa-mir-1183 |
| hsa-mir-139 | hsa-mir-3154 |
| mgH28S-2409 | hsa-mir-1182 |
| hsa-mir-27a-3p | hsa-mir-3138 |
| hsa-mir-27a-5p | hsa-mir-148a |
| hsa-mir-222 | hsa-mir-3178 |
| hsa-mir-181c | hsa-mir-3175 |
| U14B | hsa-mir-936 |
| hsa-mir-27a | hsa-mir-4271 |
| U60-3p | ACA44-3p |
| hsa-mir-140 | ENSG00000252840 |
| hsa-mir-24-2-3p | hsa-mir-886-5p |
| ACA40 | ENSG00000207187 |
| U60-5p | ENSG00000201619 |
| hsa-mir-505-3p | hsa-mir-3162 |
| hsa-mir-29a | hsa-mir-194 |
| hsa-mir-503 | hsa-mir-27a |
| ACA18 | hsa-mir-192 |
| hsa-mir-935 | ACA61 |
| hsa-mir-7-1-3p | hsa-mir-483 |
| hsa-mir-23a | U75-3p |
| U82 | ACA16 |
| | hsa-mir-675 |
| | hsa-mir-1228 |
| | ACA10 |
| | hsa-mir-23a |
| | hsa-mir-1207 |
| | hsa-mir-196b |
| | ACA44-5p |
| | U44 |
| | hsa-mir-197 |
| | U75-5p |
| | hsa-mir-181c |
| | hsa-mir-466 |
| | U76 |
| | hsa-mir-181a-2-3p |
| | ENSG00000221300 |

hsa-mir-765

U70

hsa-mir-885

U17b-3p

hsa-mir-616

U17b-5p

U81

hsa-mir-4257

hsa-mir-3196

hsa-mir-3202

ENSG00000201346
