

Epigenetic regulation of AURKA by miR-4715-3p in upper gastrointestinal cancers

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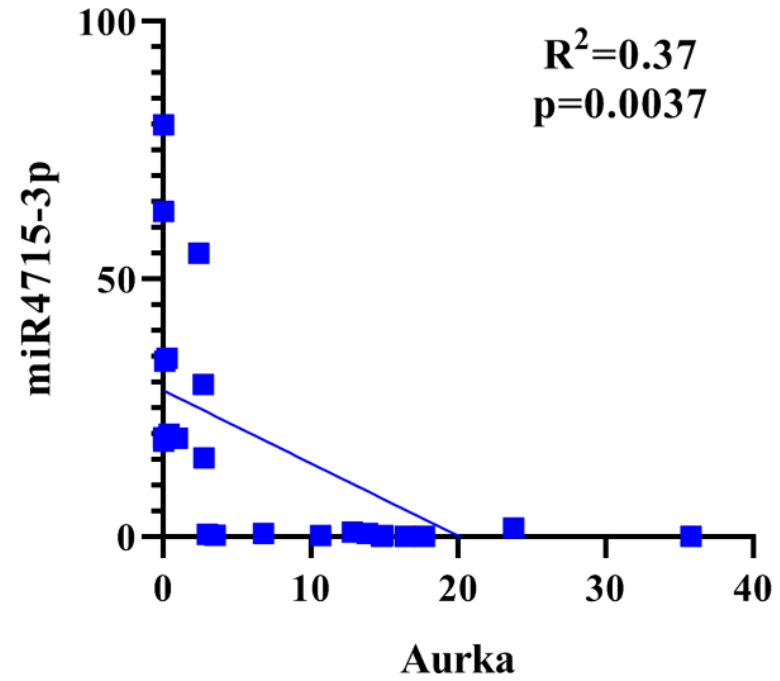
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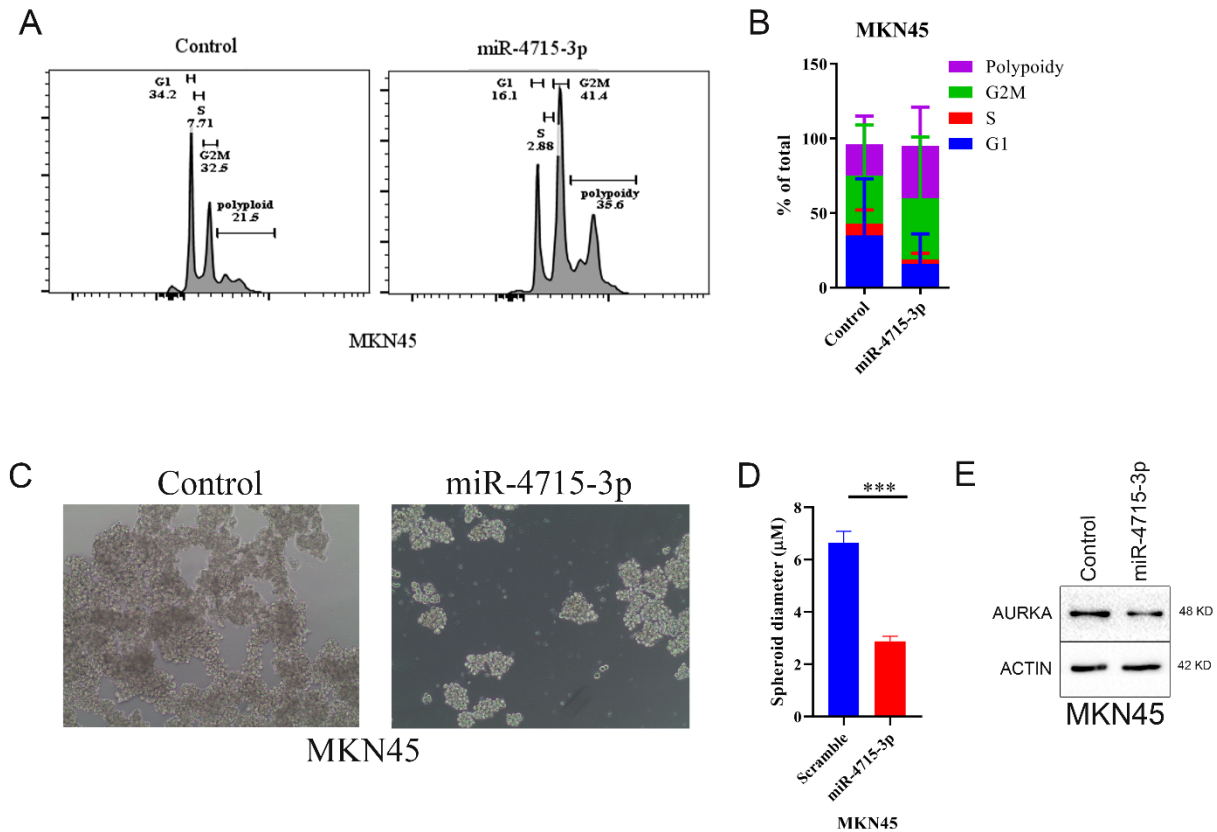
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Supplementary Figure 1



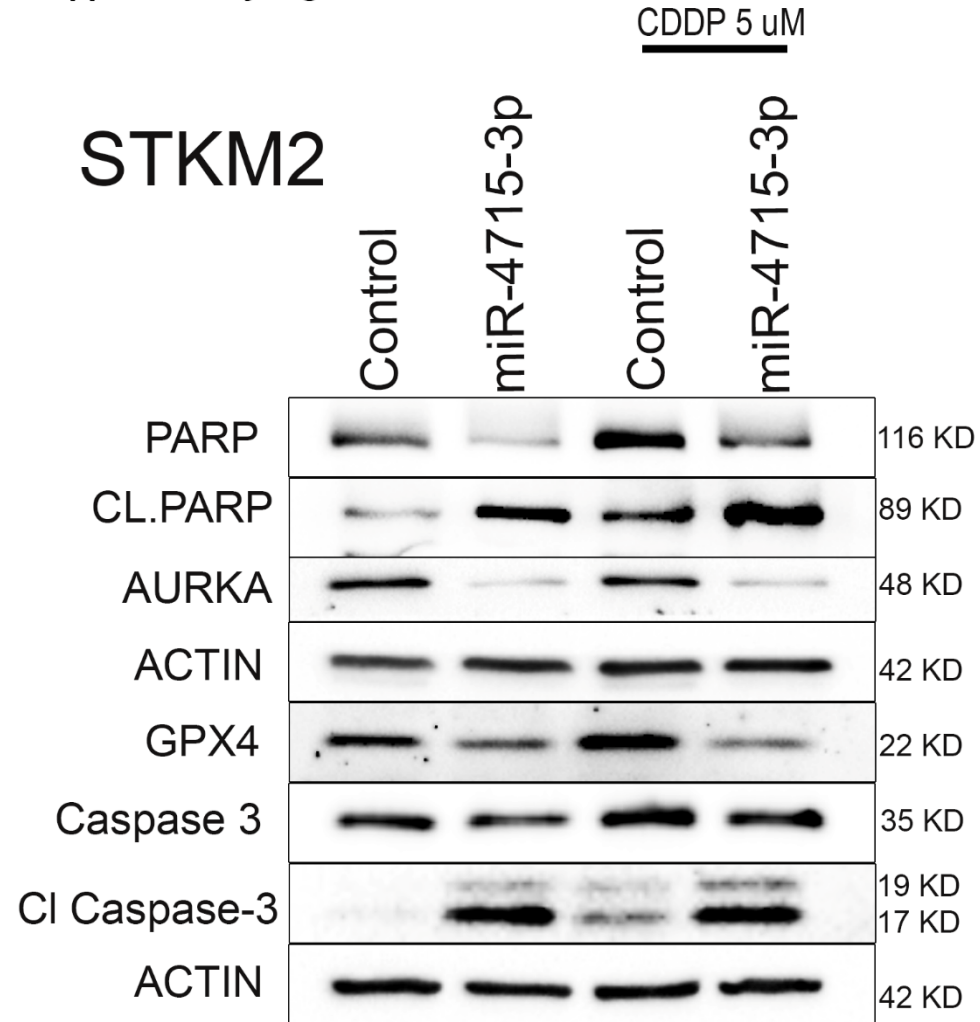
Supplementary Figure 1. Inverse correlation of expression AUKRA and miR4715-3p. Normal gastric and tumor human tissues were analyzed for the level of AURKA and miR-47-15-3p using qPCR.

Supplementary Figure 2



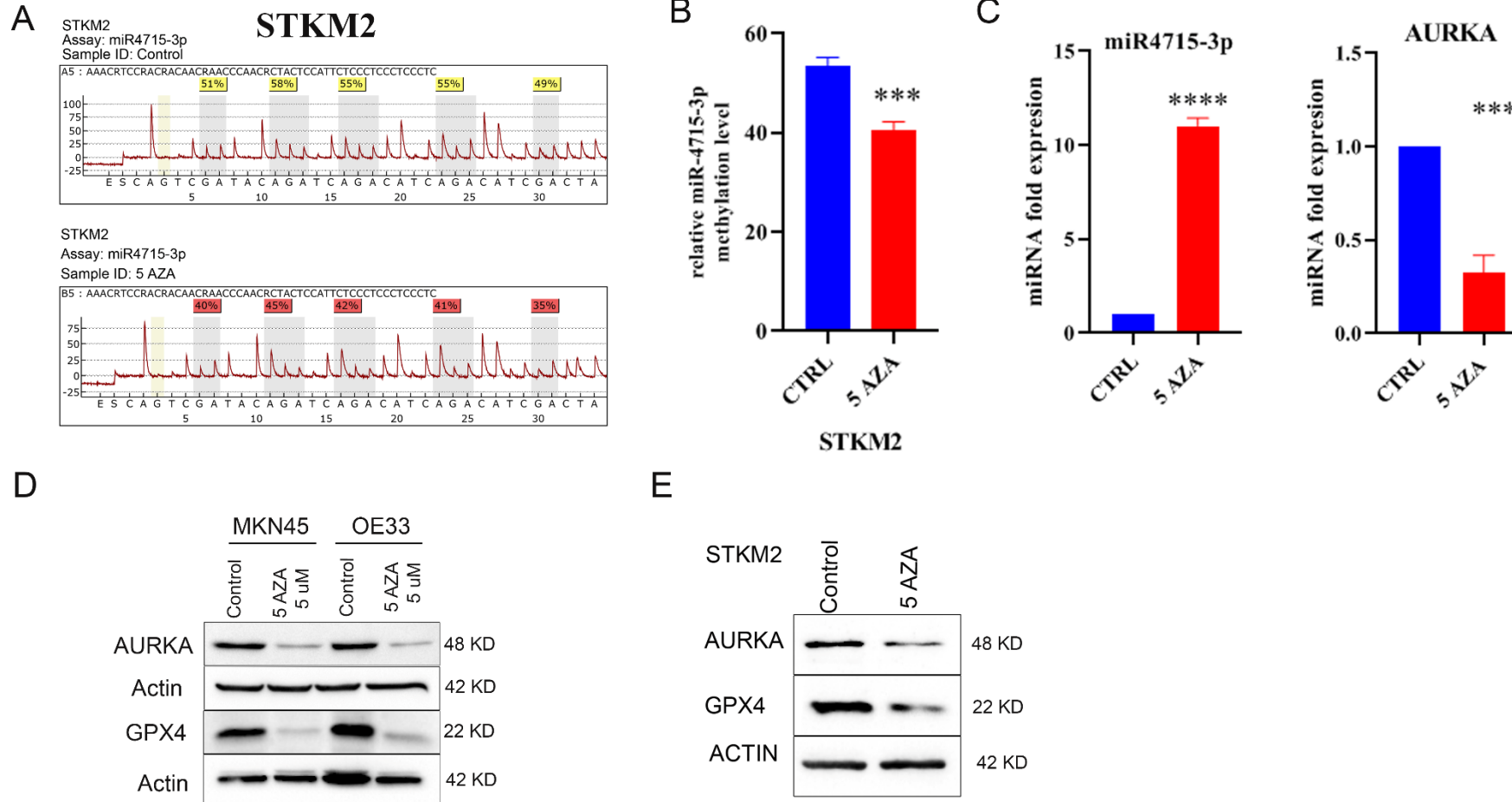
Supplementary Figure 2. miR-4715-3p suppresses cellular proliferation, and spheroid growth, enhances polyploidy, and alters cell cycle progression. (A & B) MKN45 cells were transfected with miR-4715-3p mimic 48h, and cell cycle progression was analyzed by flow cytometry. After 48h, miR-4715-3p reconstitution significantly enhanced polyploidy in MKN45 cells. **(C & D)** Reconstitution of miR-4715-3p was established by using lentiviral infection followed by establishing spheroid cultures. **(E)** Western blot analysis of MKN45 spheroids shows significant downregulation of AURKA after miR-4715-3p reconstitution.

Supplementary Figure 3



Supplementary Figure 3. miR-4715-3p overexpression increases gastric cancer cell line, STKM2, death through inhibition of GPX4. STKM2 cells were transiently transfected with miR-4715-3p. After 48 h, cells were treated with or without Cisplatin 5 μ M 18h

Supplementary Figure 4



Supplementary Figure 4. (A, B) Representative pyrosequencing profiles of STKM2 cells. **(C)** AURKA mRNA and miR-4715-3p expression levels in STKM2 cells treated with 5-Aza-2'-deoxycytidine (Decitabine) 5 μ M for 72 h. **(D,E)** Western blot analysis of AURKA and GPX4 protein expression levels in OE33, MKN45 and STKM2 cells, following treatment with 5 μ M of 5-Aza-2'-deoxycytidine (Decitabine) for 72h.

Figure 5 A

OE33

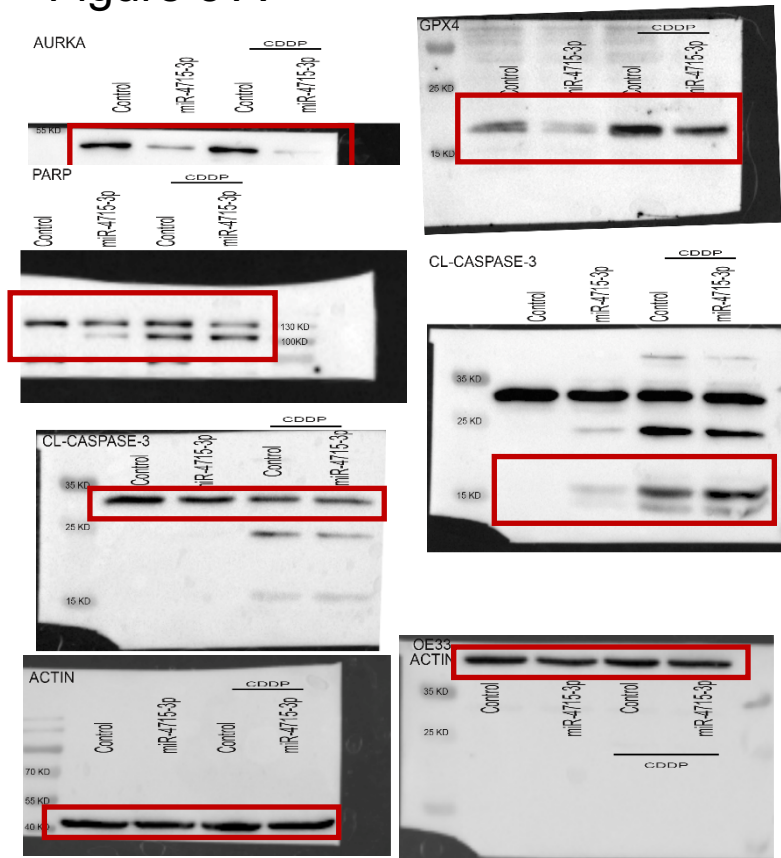


Figure 5 B

MKN45

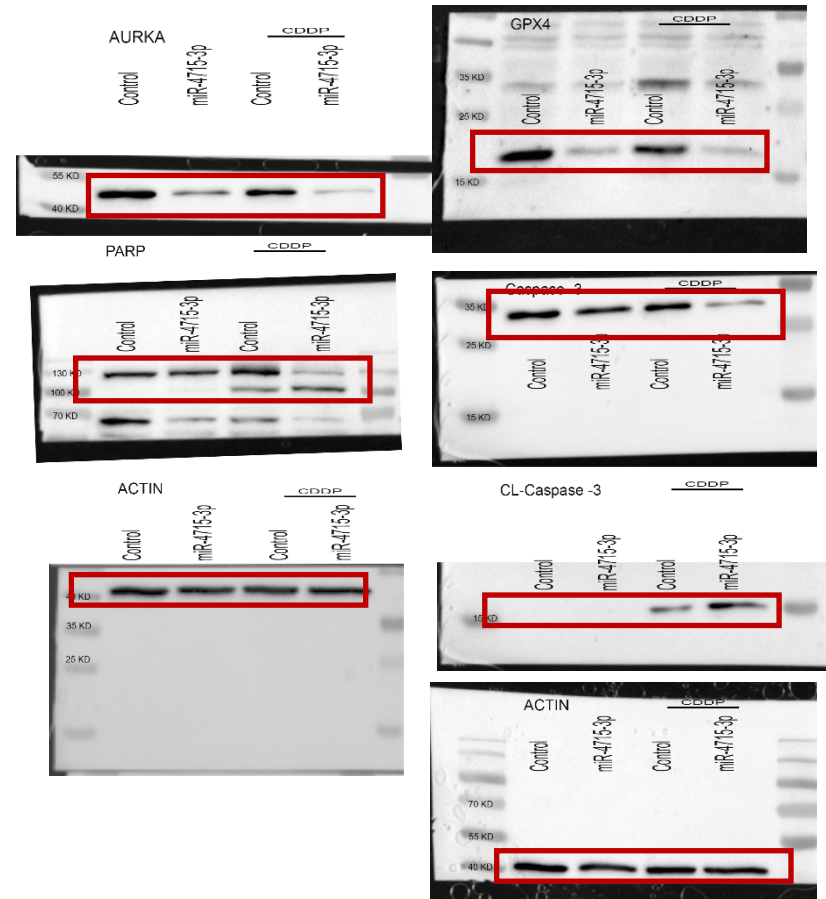


Figure 5 C

OE33

MKN45

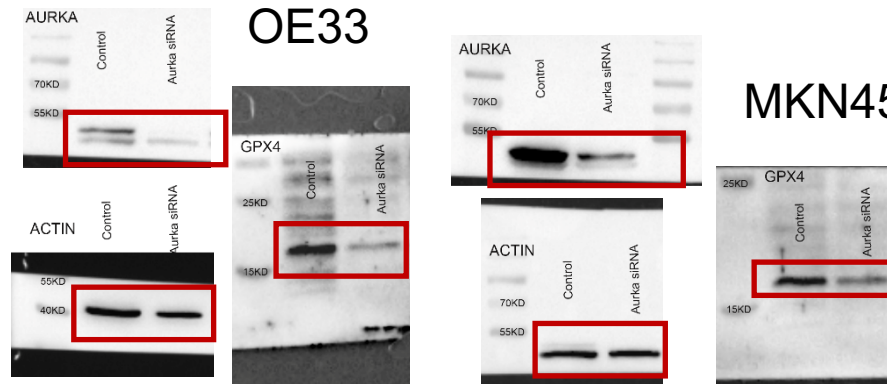
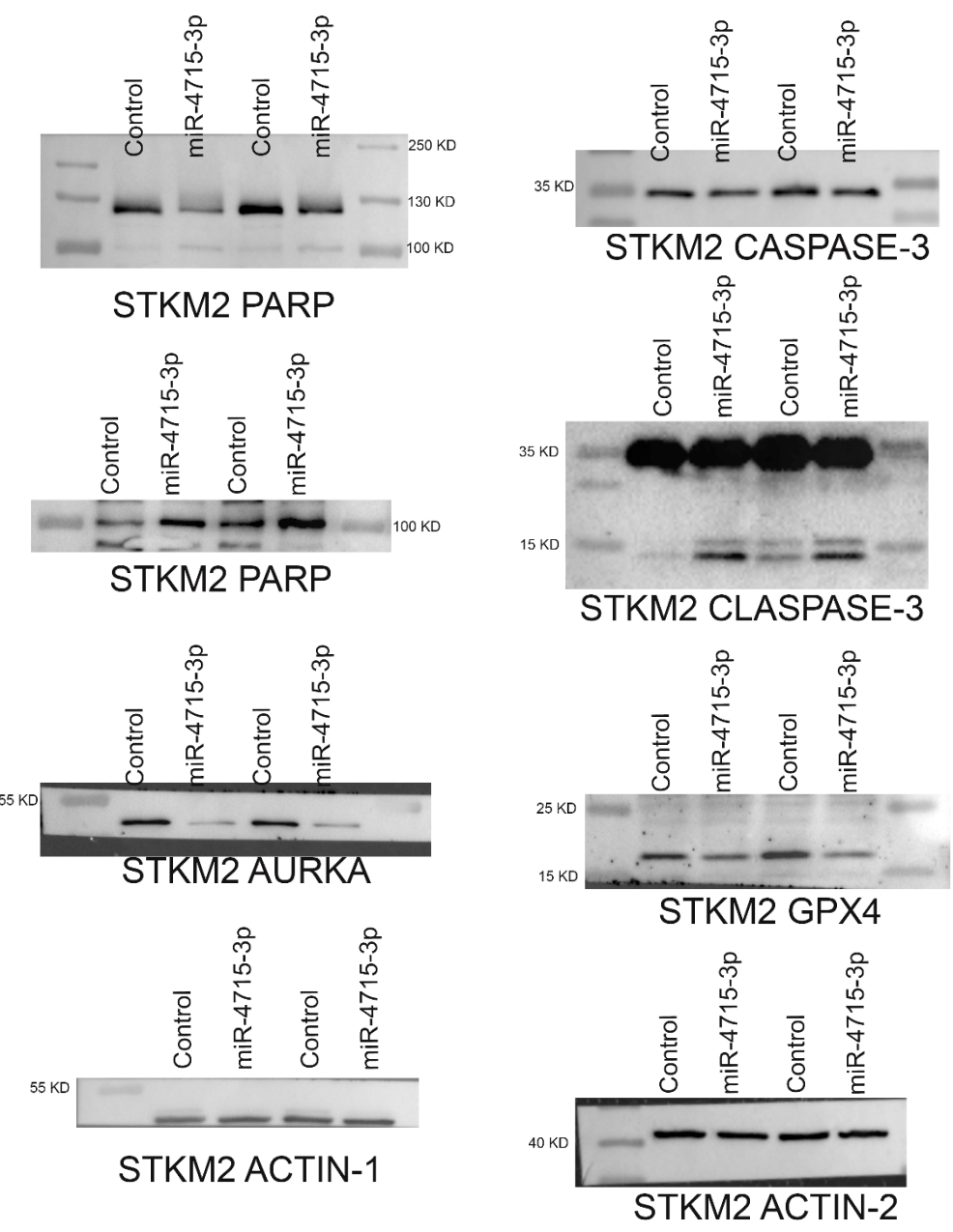
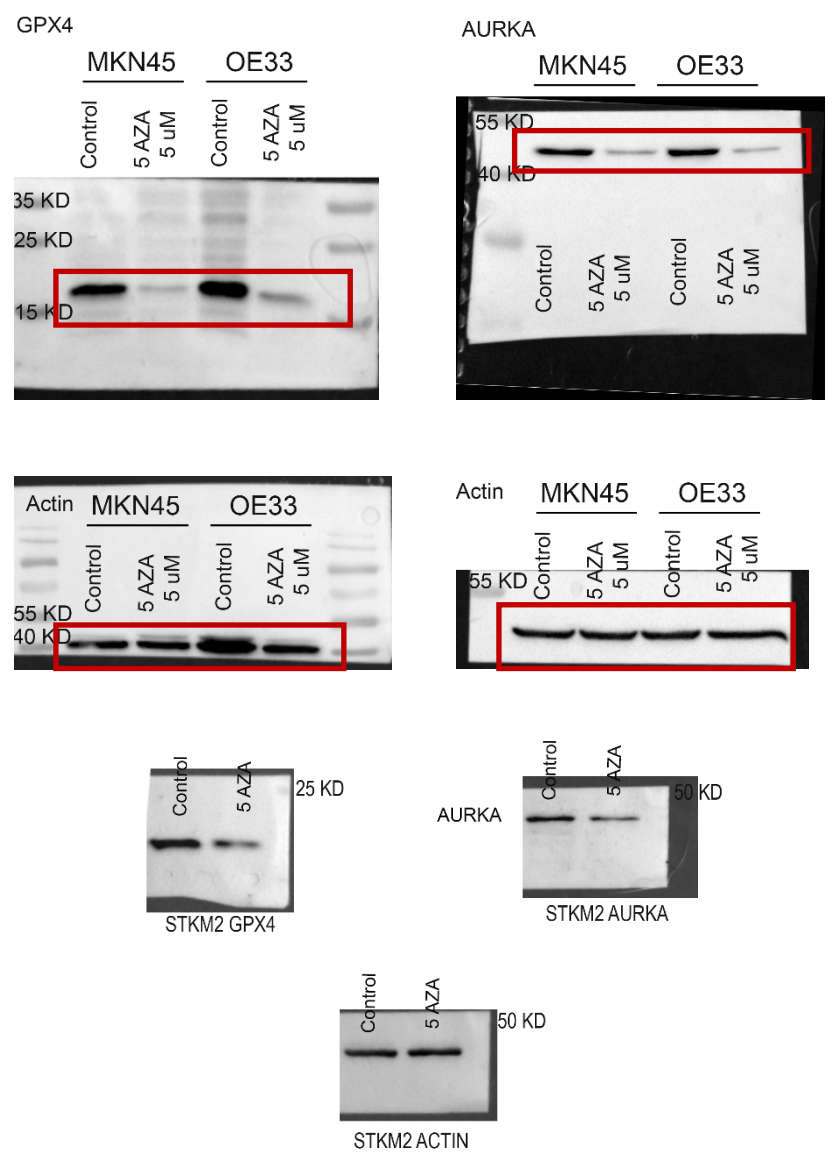


Figure 5 Raw data



Supplementary Figure 3 Raw data



Supplementary Figure 4 Raw data