Figure S1



FIGURE S1 | Representative images of CROT in immortalized ovarian surface epithelium cell lines-80 (IOSE-80) and epithelial ovarian cancer cell lines (OVCAR-3, SK-OV-3, and A2780) by immunofluorescence. Original magnification, ×400; Scale bar, 100 μm.



FIGURE S2 | GO term and KEGG enrichment analyses of CROT in OC. (A) GO term annotation of biological processes (BP). (B) GO term annotation of cellular components (CC) based on the data from GSE63885. (C) GO term annotation of molecular function (MF) analysis. (D). Kyoto Encyclopedia of Genes and Genomes (KEGG) analysis of co-expression genes with CROT. The data were acquired from the GSE63885 dataset.



FIGURE S3 | Metascape analysis of co-expression genes with CROT. The data were acquired from the GSE26712 dataset (https://metascape.org/gp/index.html#/main/step1).

Figure S4



FIGURE S4 | Detection of CROT mRNA and protein expression by qRT-PCR and Western blot. (A-C) Expression of CROT mRNA and protein in OVACR-3, SK-OV-3, and A2780 cells after CROT-overexpressing plasmid (oe-CROT) transfection for 48 h. (**D-F**) Expression of CROT mRNA and protein detected in OVACR-3, SK-OV-3, and A2780 cells after CROT-siRNAs (si-CROT) transfection for 48 h. Assays were repeated at least three times. Data were presented as mean \pm SEM. *, P <0.05; **, P < 0.01; ****, P < 0.0001; ns, not significant.



FIGURE S5 | Detection of cell migration by the wound healing assay. (**A**) Measurement of wound healing in OVCAR-3 and SK-OV-3 cells after CROT-overexpressing plasmid (oe-CROT) transfection for 0 and 72 h. (**B**) Measurement of wound healing in OVCAR-3 and SK-OV-3 cells after CROT-siRNAs (si-CROT) transfection for 0 and 72 h. Negative controls were compared. Scale bar, 100 μm.





FIGURE S6 | Detection of Bax and Bcl-2 proteins by Western blot. (**A-B**) SK-OV-3 cells and A2780 cells were transfected with CROT-overexpressing plasmid (oe-CROT) for 48 h.



FIGURE S7 | Detection of CROT protein in SK-OV-3 cells. (A) Protein was detected by Western blot after the treatment of miR-33a-5p inhibitors for 48 h. (B) The histogram shows the densitometric analyses of protein bands in A (n=3). Data were presented as mean \pm SEM. *, P <0.05.



FIGURE S8 | Effect of TGF- β on CROT expression. (A) GSEA analysis of the association between the enrichment of the TGF- β signaling pathway and CROT expression based on the data from the TCGA-OV database. (**B-C**) Detection of CROT mRNA and protein expression in OVACR-3 and A2780 cells after the administration of TGF- β 1 (0, 1, or 10 ng/ml) by qRT-PCR and Western blot. Data were presented as mean \pm SEM. GSEA, gene set enrichment analysis; ns, not significant.