

Figure S1

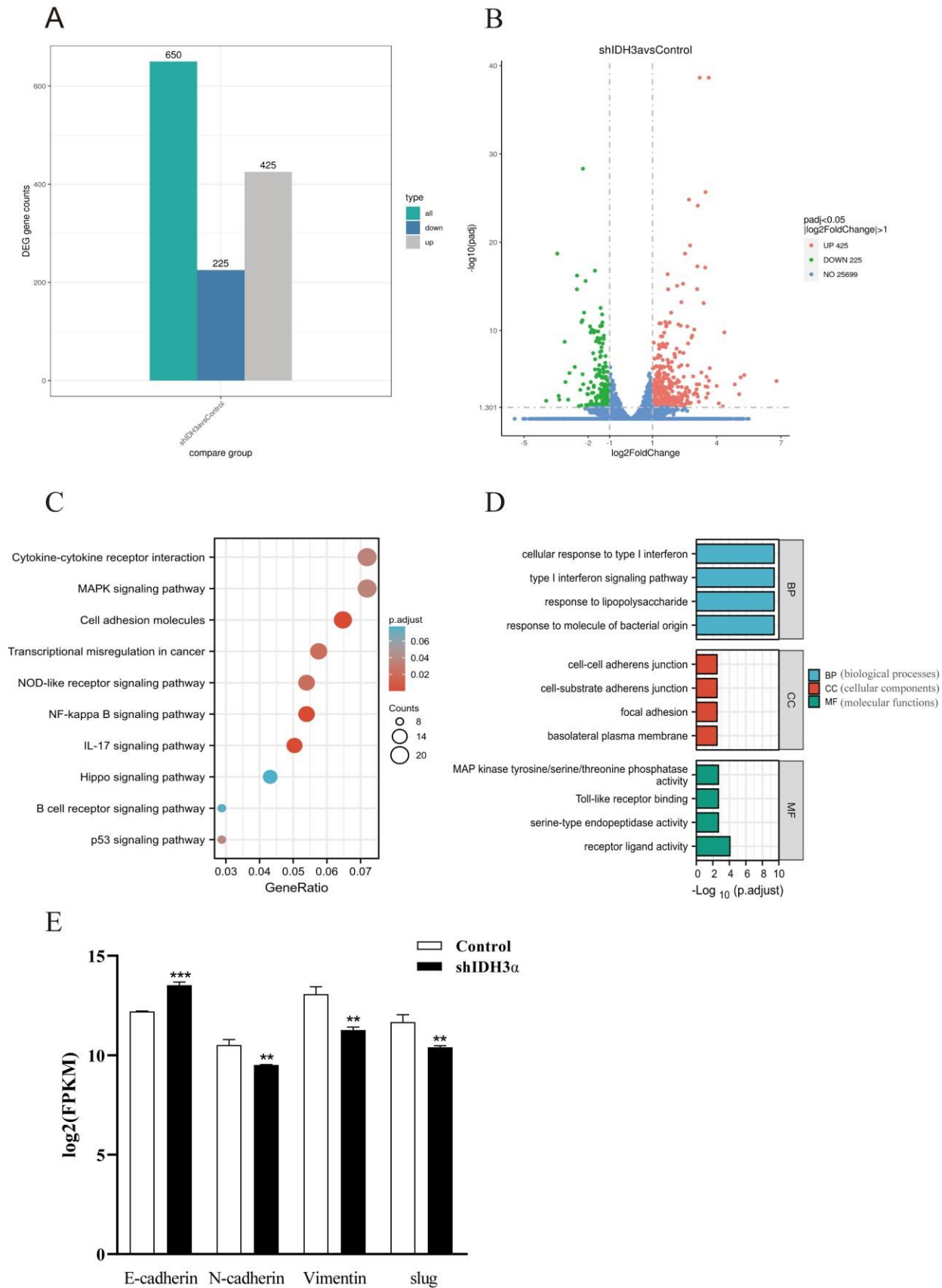


Figure S1. RNA-seq results.

A, Statistical histogram of the number of differential genes (both up- and down-regulated) for each comparative combination ($p \text{ adj} \leq 0.05$, $|\log_2 \text{FoldChange}| \geq 1.0$). **B**, Volcano plot of differential gene distribution in treatment and control groups. **C-D**, KEGG(**C**), and GO (**D**) enrichment analyses were conducted using the R “clusterProfiler” package. BP, biological processes; MF, molecular functions; CC, cellular components. **E**, The expression statistics of EMT markers in the RNA-seq data.

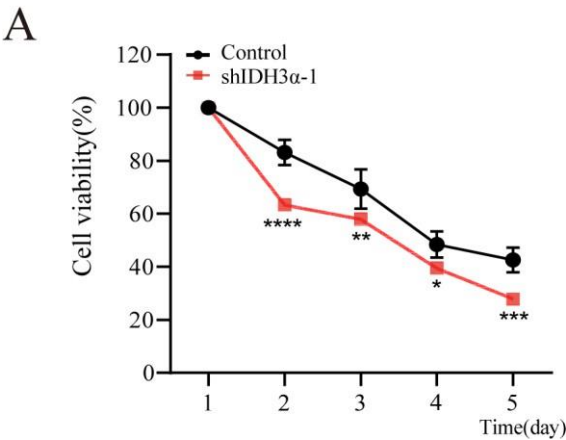


Figure S2. SiHa cells’ viability using CCK8 assay.
SiHa cells’ viability was time-dependently inhibited after the use of 5μM cisplatin treatment.

Figure S3

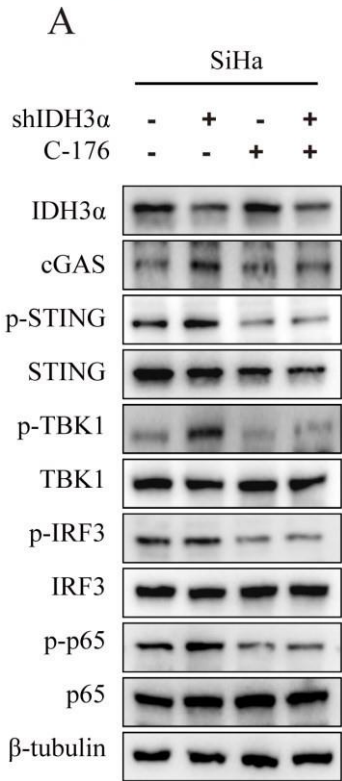


Figure S3. WB detection of cGAS-STING pathway-related protein expression.
A. WB detection of cGAS-STING pathway-related protein expression after 20μM C-176 treatment for 24h in SiHa cells.

Figure S4

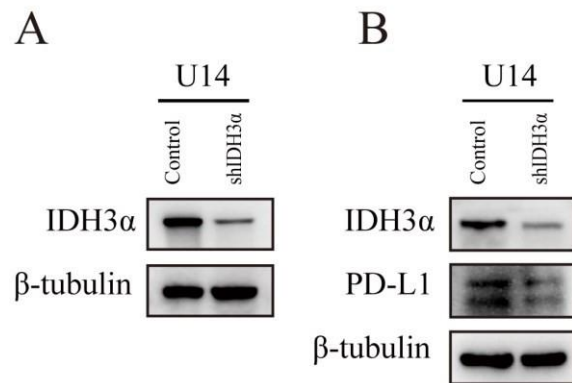


Figure S4. IDH3 α could regulate the expression level of PD-L1

A, Validation of IDH3 α knockdown mouse cervical cancer stable cell line by WB. **B**, Western blot analysis of the effect of IDH3 α -deleted on PD-L1 expression in mouse UCC cells.

Original blots corresponding to Figure 2A:

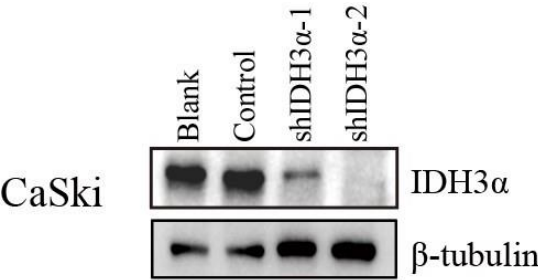


Fig 2A. CaSki IDH3A

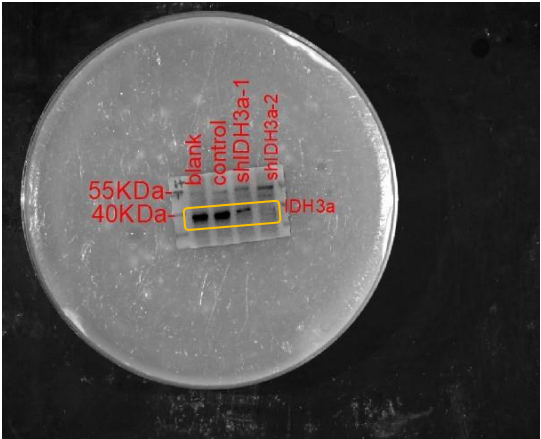


Fig 2A. CaSki β -tubulin

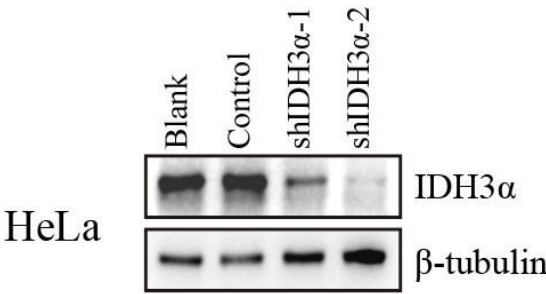
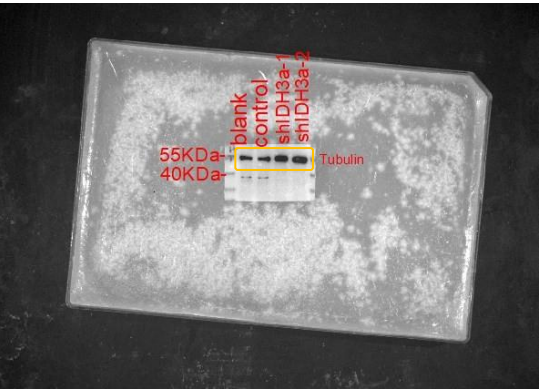


Fig 2A. HeLa IDH3A

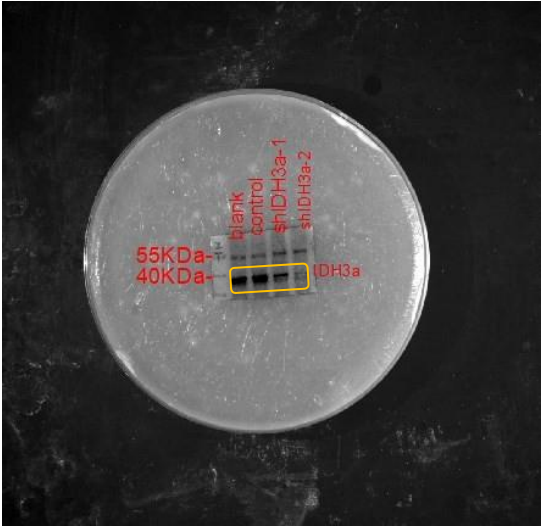
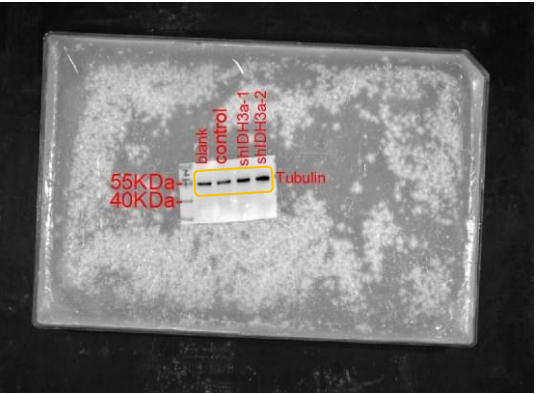


Fig 2A. HeLa β -tubulin



Original blots corresponding to Figure 3C:

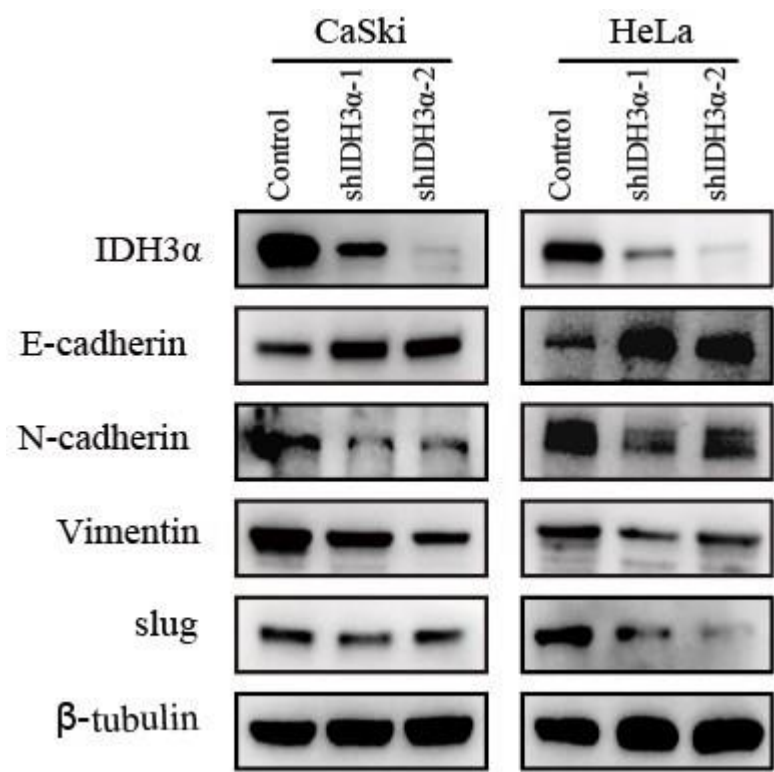


Fig 3C. Caski IDH3A

Fig 3C. Caski E-cadherin

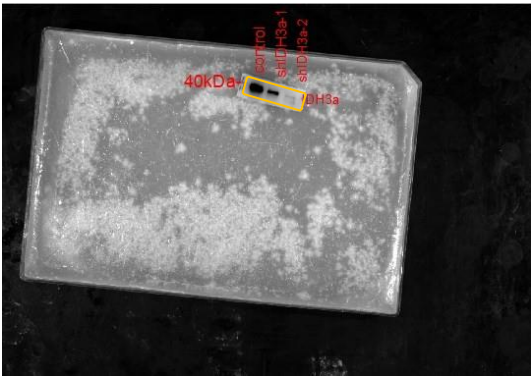


Fig 3C. Caski N-cadherin

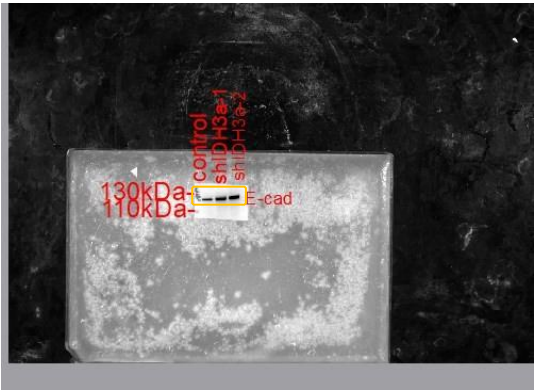


Fig 3C. Caski Vimentin

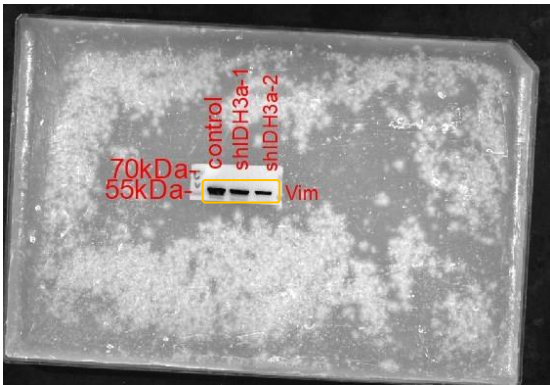
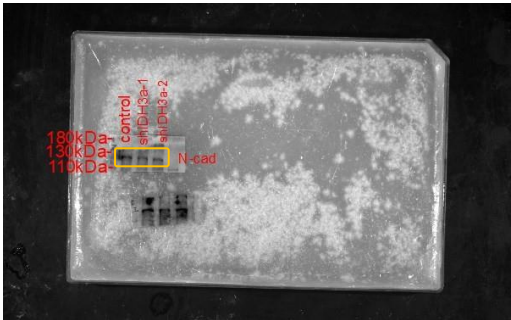


Fig 3C. Caski slug

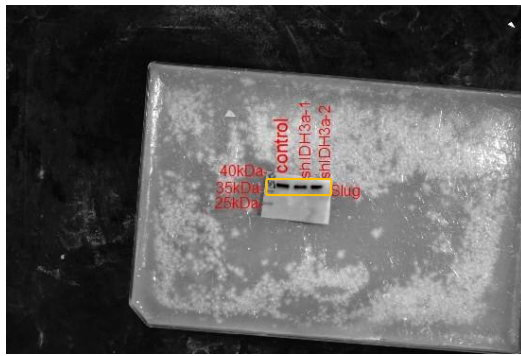


Fig 3C. Caski β -tubulin

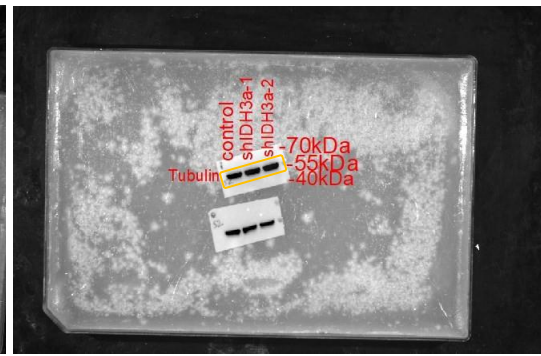


Fig 3C. Hela IDH3A

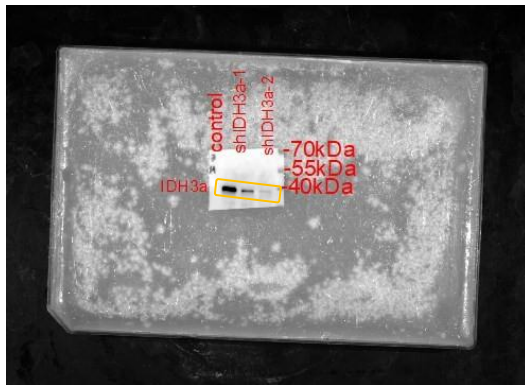


Fig 3C. Hela E-cadherin

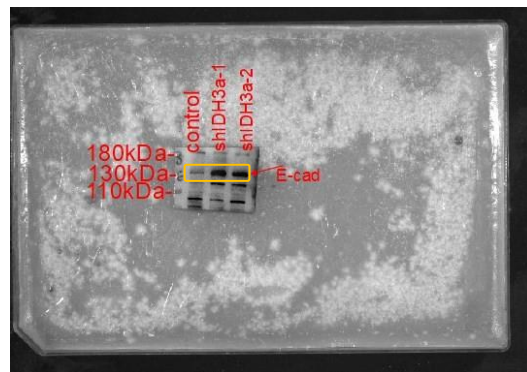


Fig 3C. Hela N-cadherin

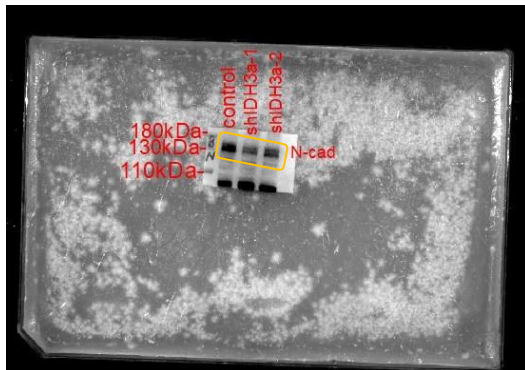


Fig 3C. Hela Vimentin

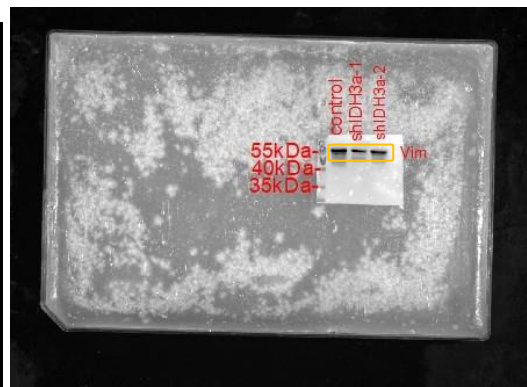


Fig 3C. Hela slug

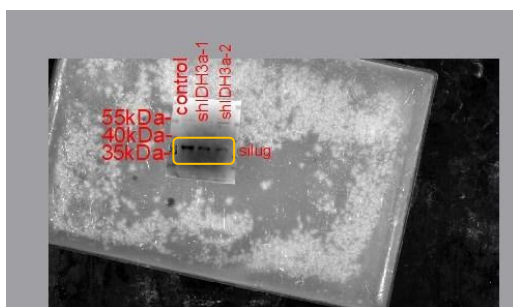
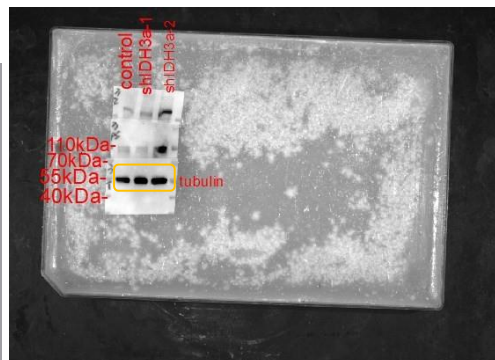


Fig 3C. Hela β -tubulin



Original blots corresponding to Figure 3F:

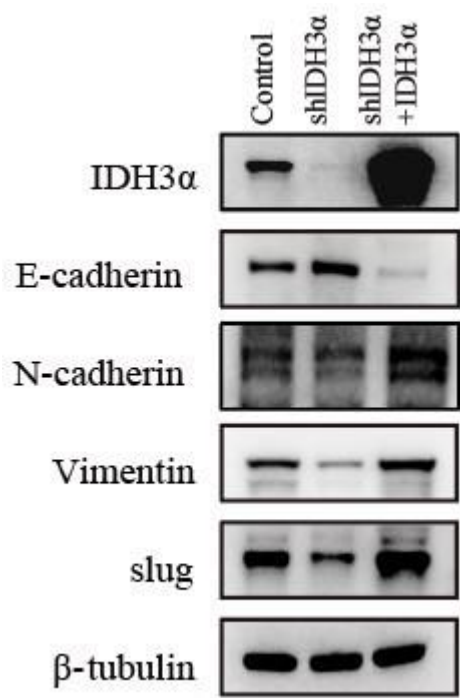


Fig 3F. Caski IDH3A

Fig 3F. Caski E-cadherin

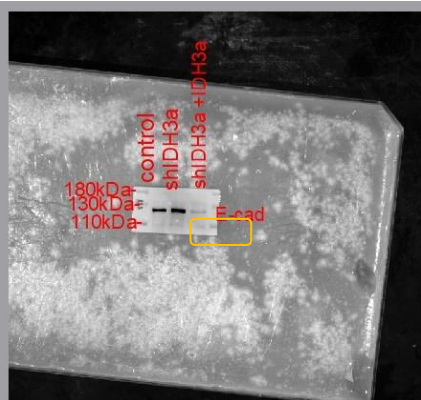
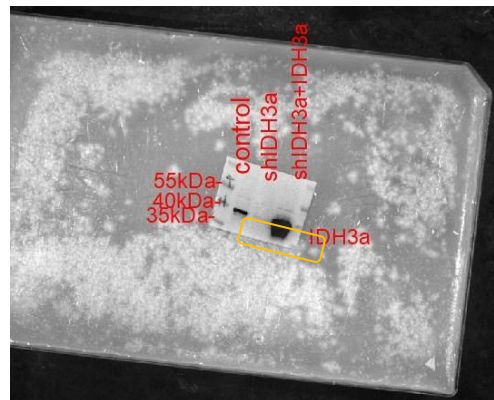


Fig 3F. Caski N-cadherin

Fig 3F. Caski Vimentin

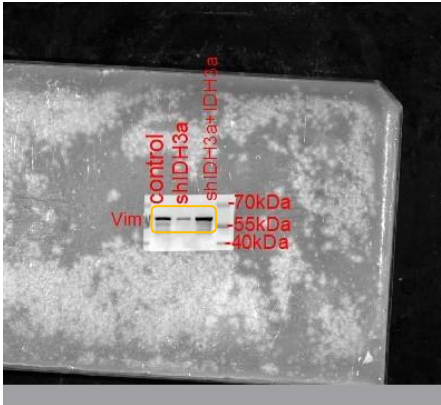
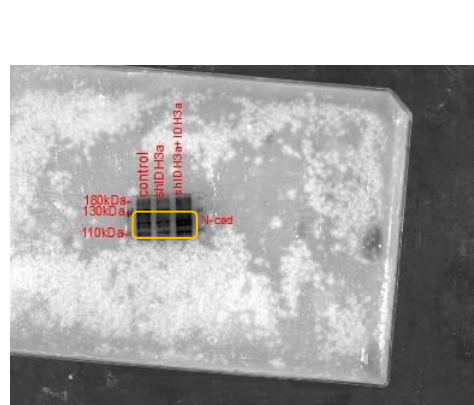


Fig 3F. Caski slug

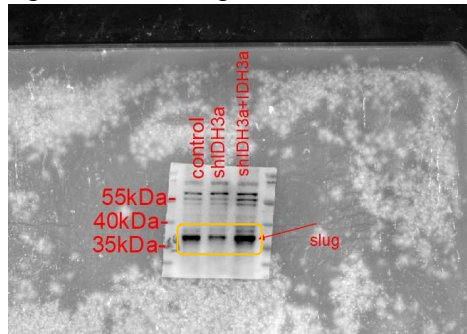
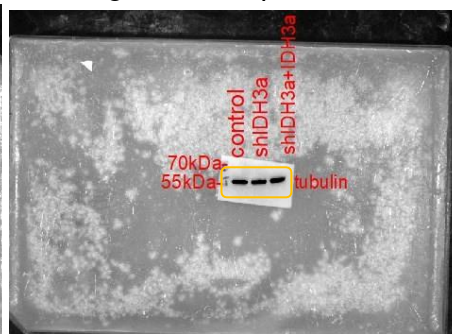


Fig 3F. Caski β -tubulin



Original blots corresponding to Figure 3H:

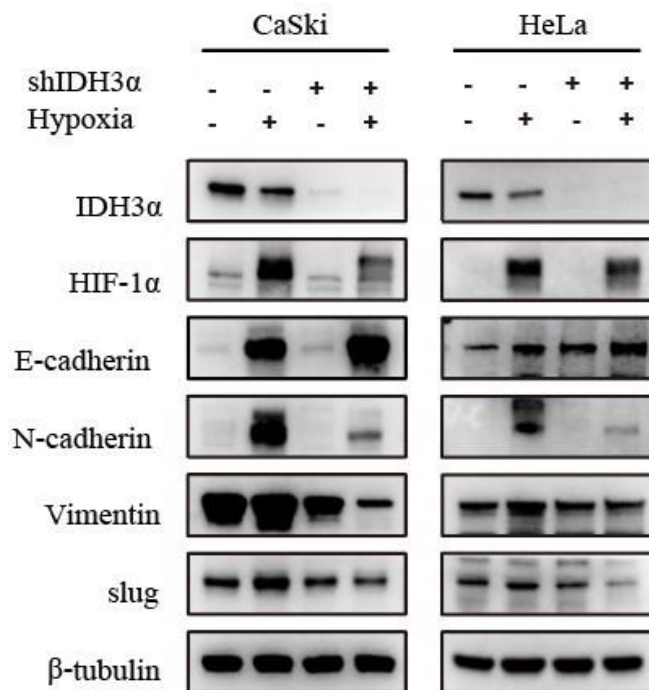


Fig 3H. Caski IDH3A



Fig 3H. Caski HIF-1 α

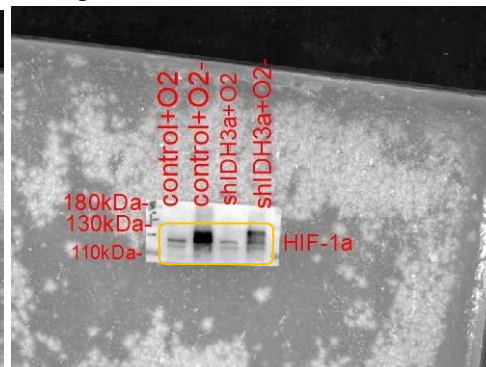


Fig 3H. Caski E-cadherin

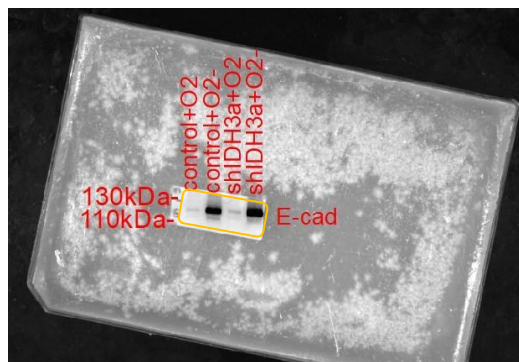


Fig 3H. Caski N-cadherin

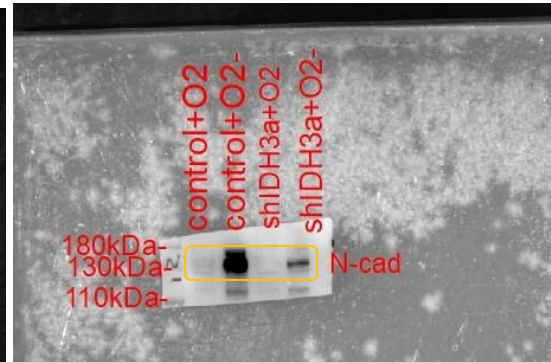


Fig 3H. Caski Vimentin

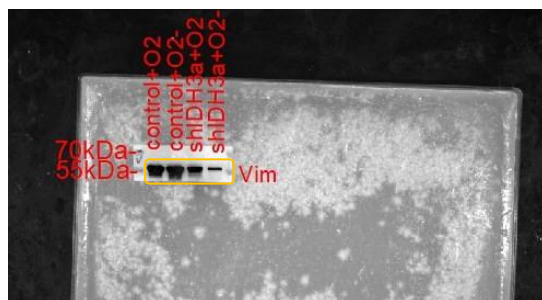


Fig 3H. Caski slug

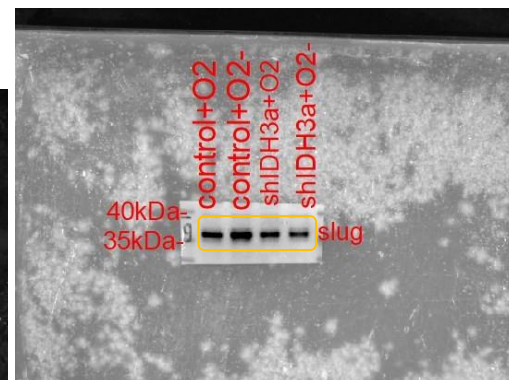


Fig 3H. Caski β -tubulin

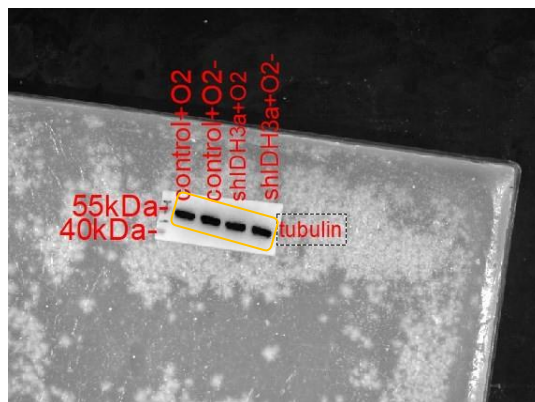


Fig 3H. Hela IDH3A+ β -tubulin

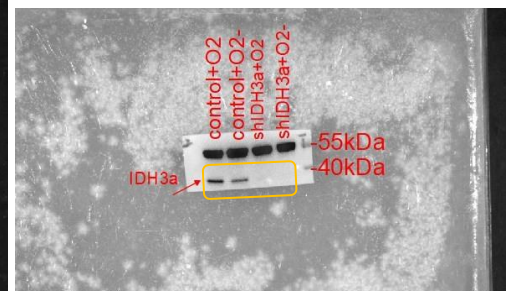


Fig 3H. Hela HIF-1 α

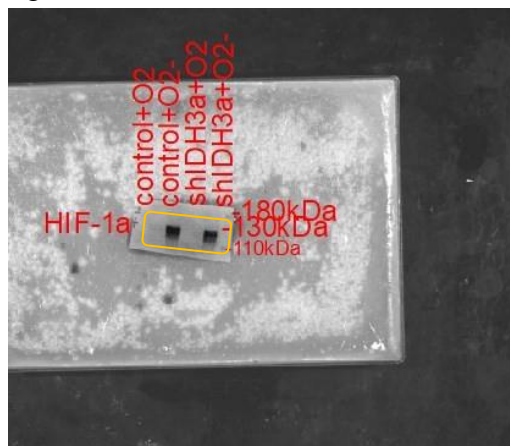


Fig 3H. Hela E-cadherin

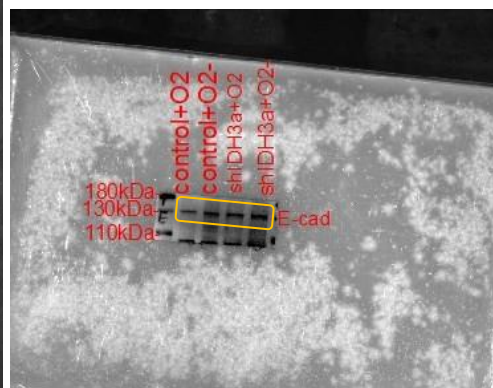


Fig 3H. Hela N-cadherin

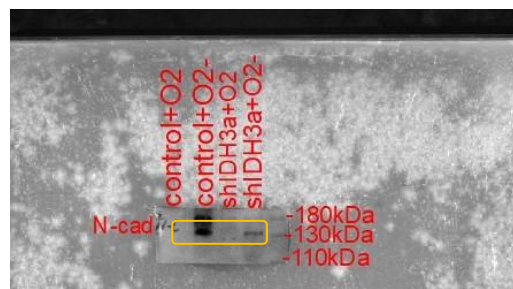


Fig 3H. Hela Vimentin

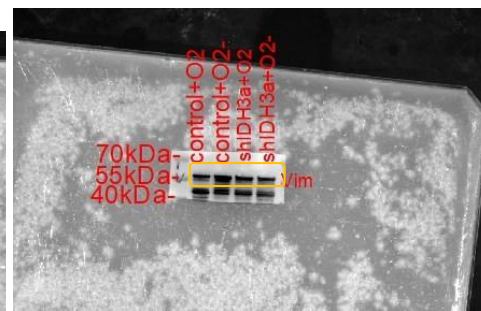


Fig 3H. Hela slug

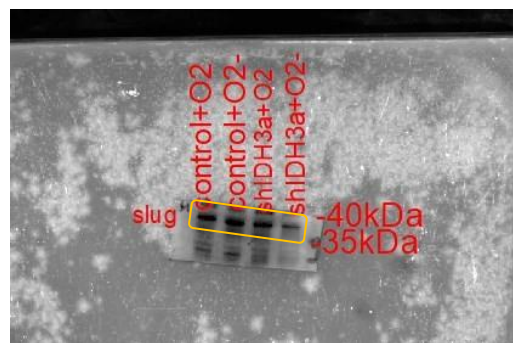
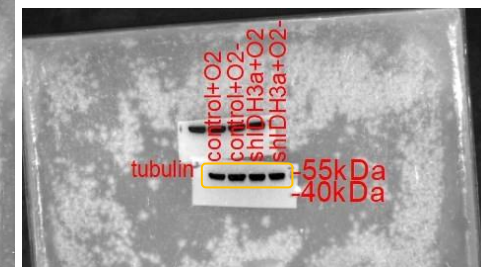


Fig 3H. Hela β -tubulin



Original blots corresponding to Figure 4D:

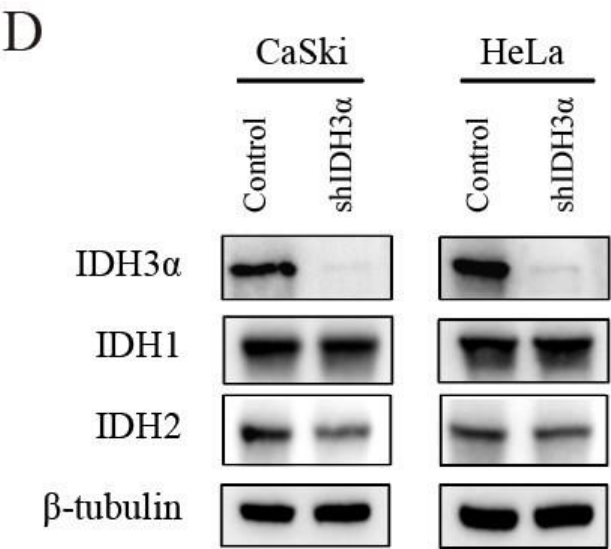


Fig 4D. Caski IDH3A

Fig 4D. Caski IDH1

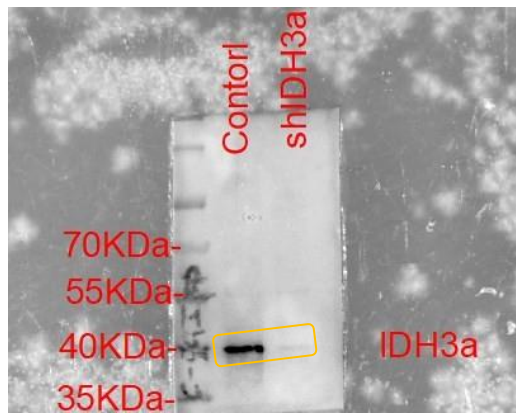


Fig 4D. Caski IDH2

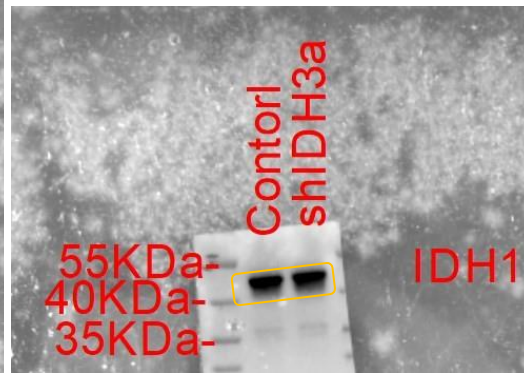


Fig 4D. Caski tubulin

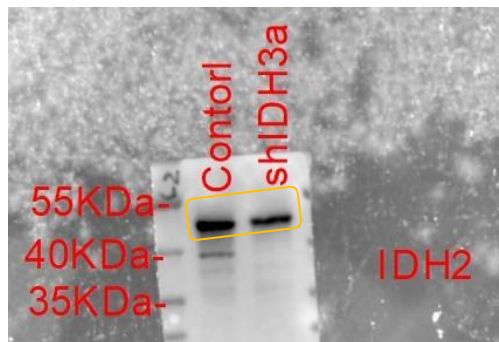


Fig 4D. HeLa IDH3A

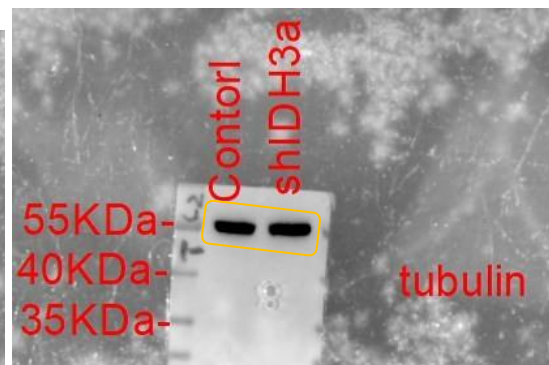


Fig 4D. HeLa IDH1

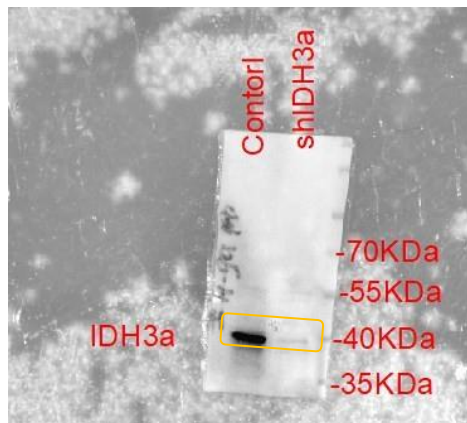


Fig 4D. HeLa IDH2

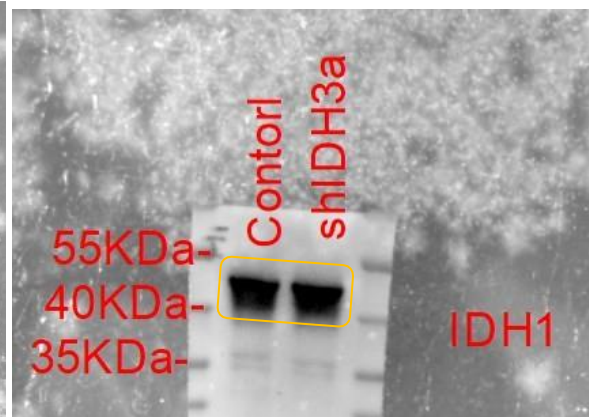
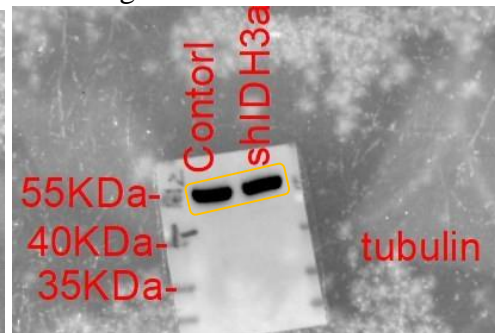
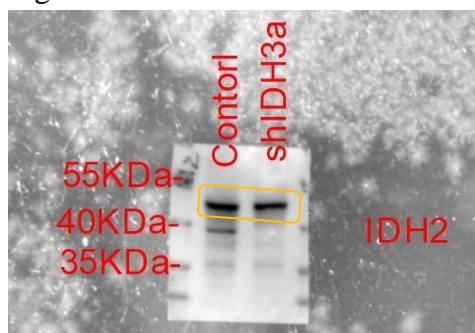


Fig 4D. HeLa tubulin



Original blots corresponding to Figure 5C:

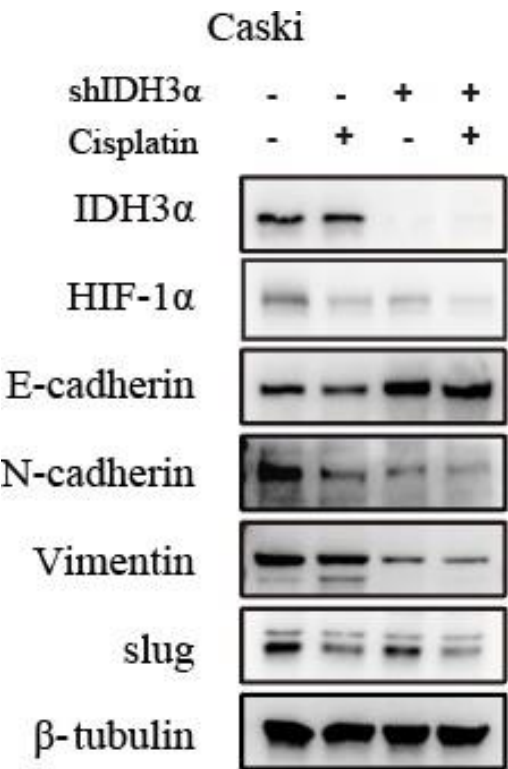


Fig 5C. Caski IDH3A

Fig 5C. Caski HIF-1α

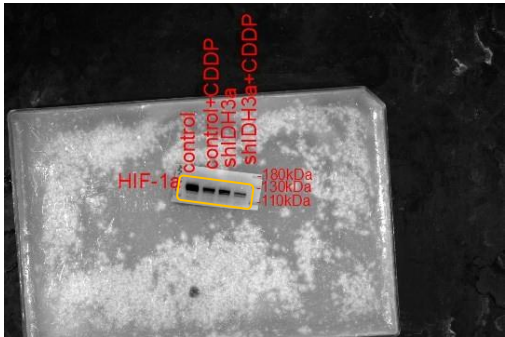
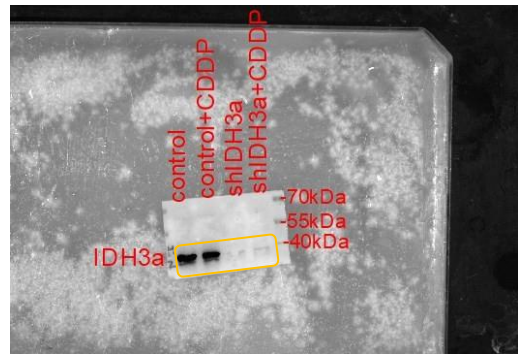


Fig 5C. Caski E-cadherin

Fig 5C. Caski N-cadherin

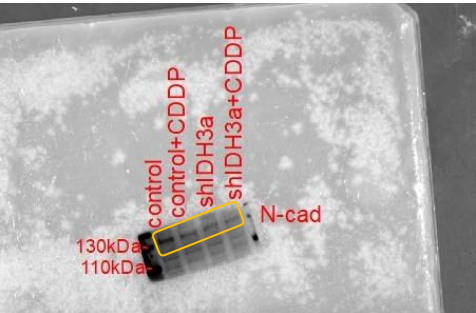
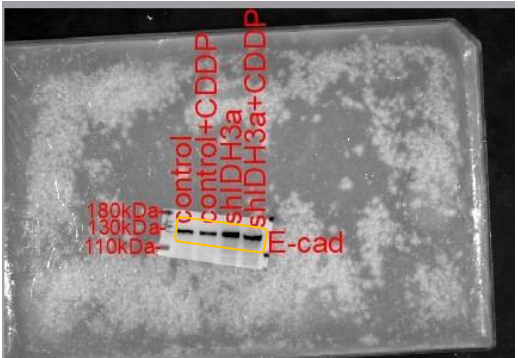


Fig 5C. Caski Vimentin

Fig 5C. Caski slug

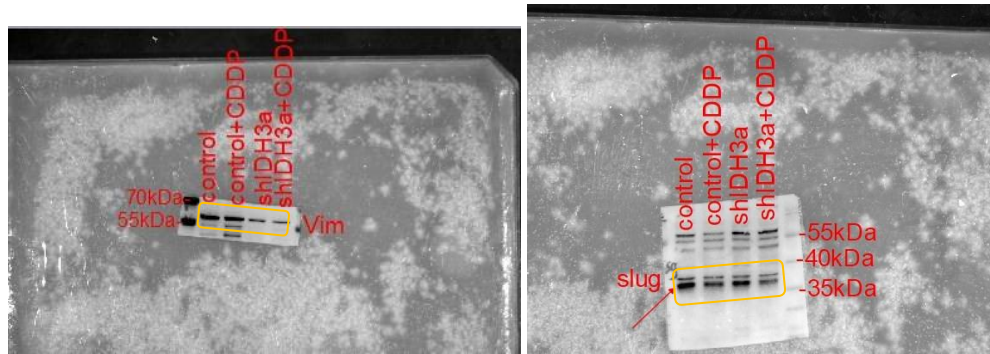
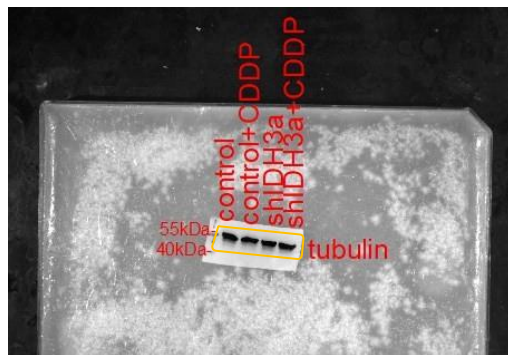


Fig 5C. Caski β -tubulin



Original blots corresponding to Figure 7C:

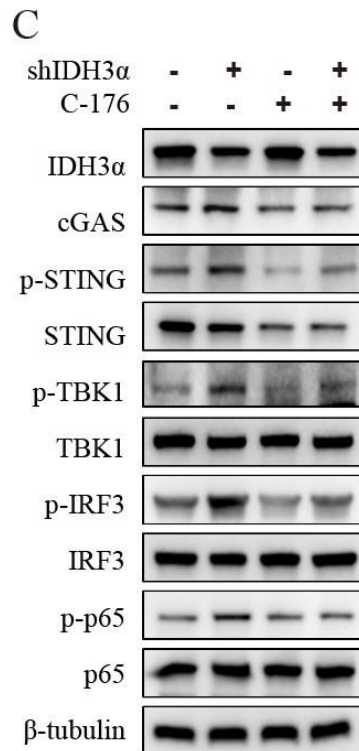


Fig 7C. HeLa IDH3A

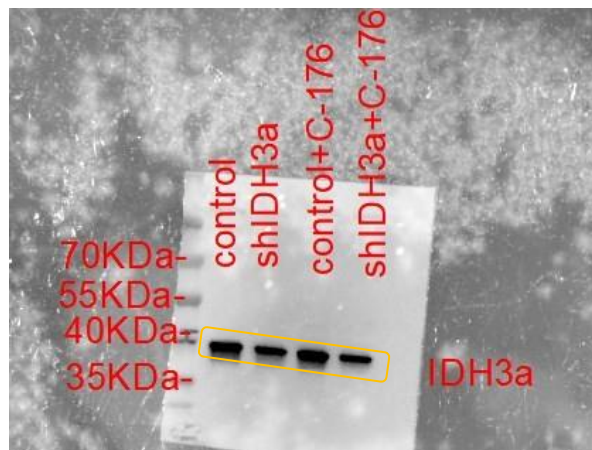


Fig 7C. HeLa cGAS

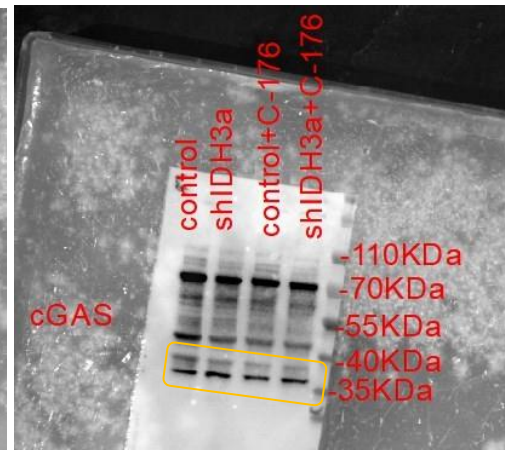


Fig 7C. HeLa p-STING

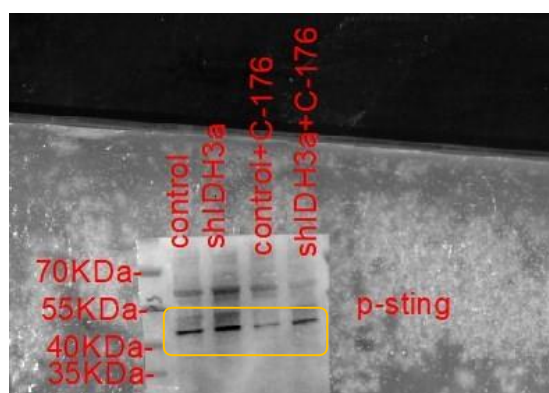


Fig 7C. HeLa STING

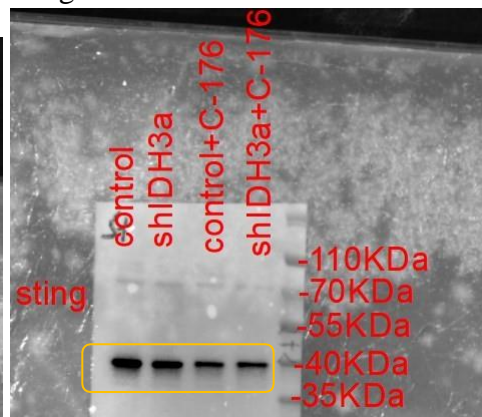


Fig 7C. HeLa p-TBK1

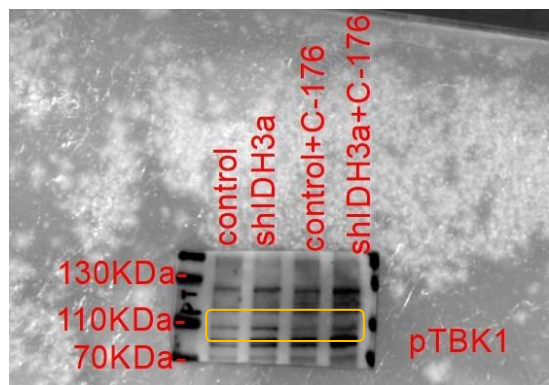


Fig 7C. HeLa TBK1

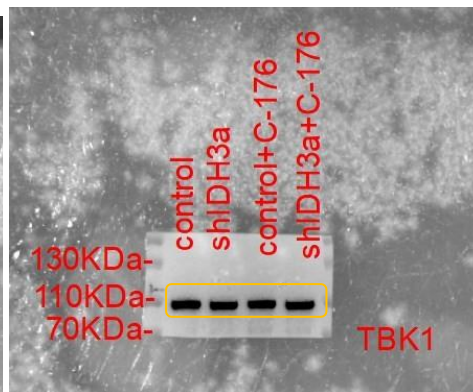


Fig 7C. HeLa p-IRF3



Fig 7C. HeLa IRF3



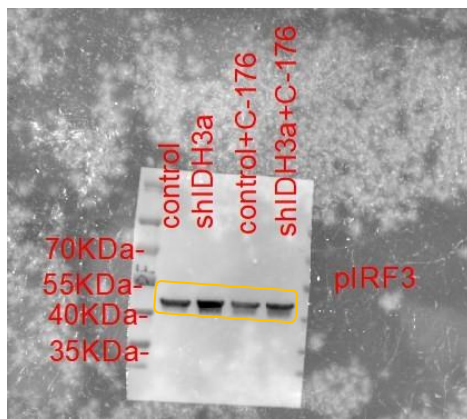


Fig 7C. HeLa p-p65

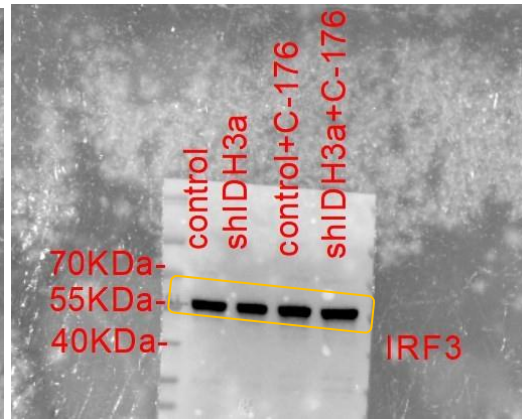


Fig 7C. HeLa p65

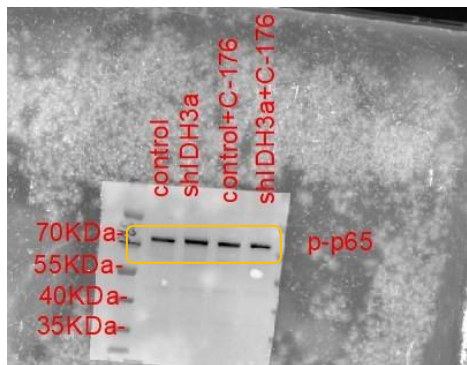
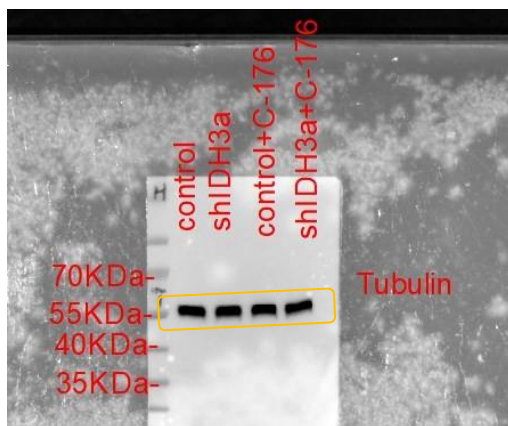
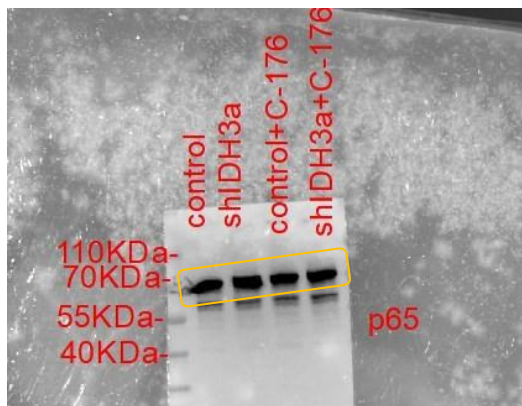


Fig 7C. HeLa β -tubulin



Original blots corresponding to Figure 7I:

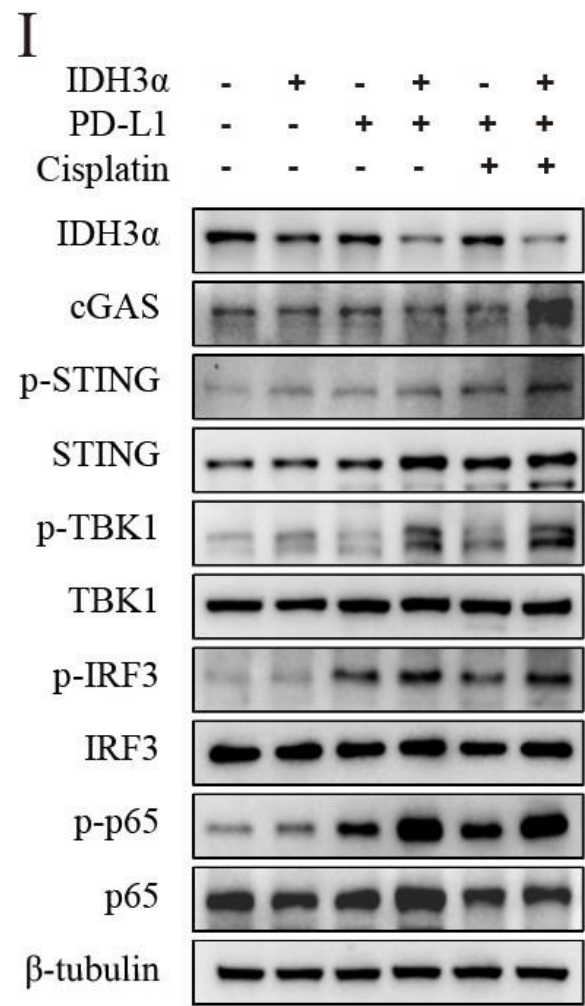


Fig 7I. IDH3A

Fig 7I. cGA

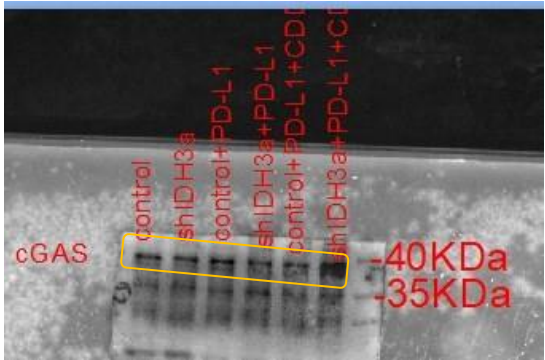
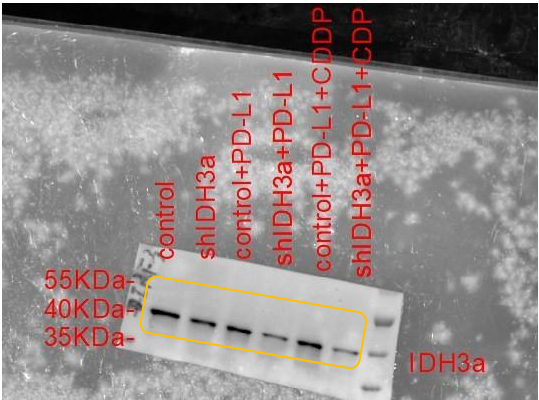


Fig 7I. p-STING

Fig 7I. STING

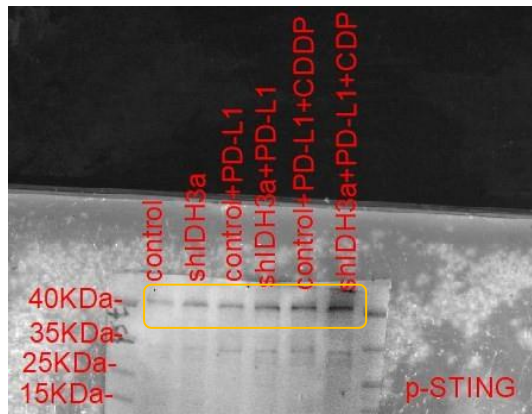


Fig 7I. p-TBK1

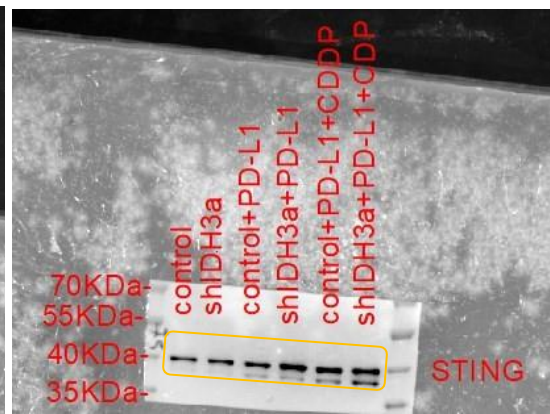


Fig 7I. TBK1

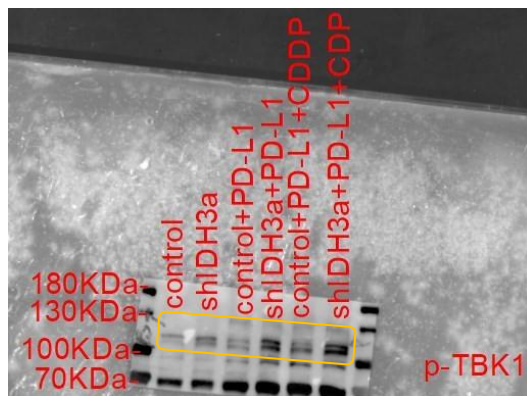


Fig 7I. p-IRF3

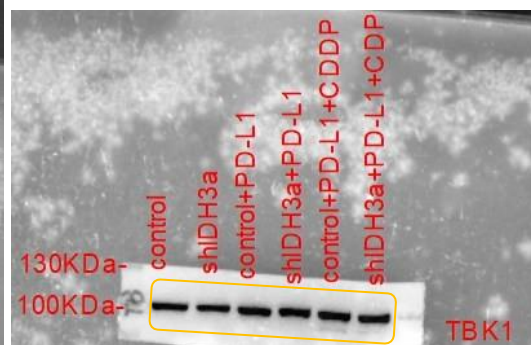


Fig 7I. IRF3

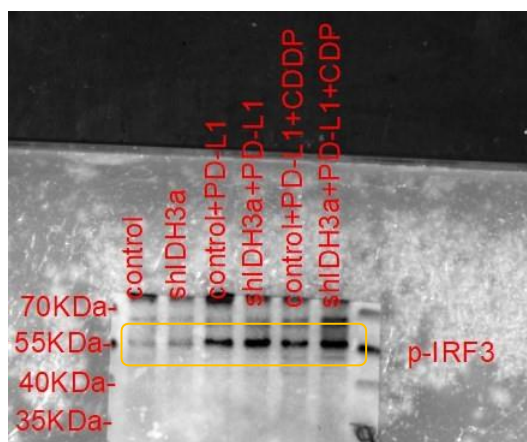


Fig 7I. p-p65

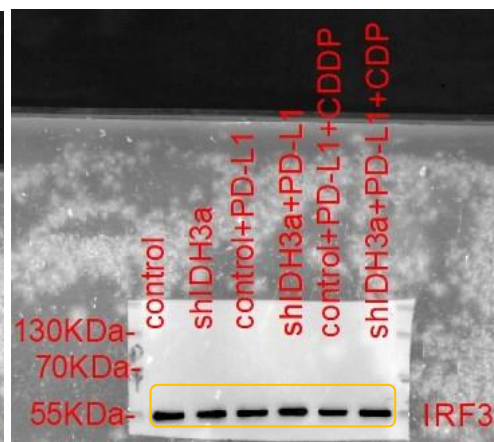


Fig 7I. p65

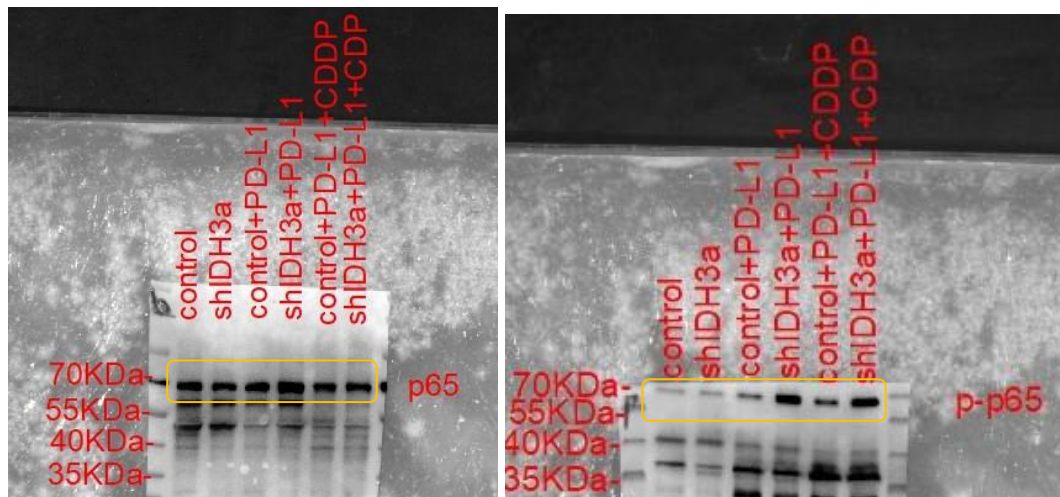
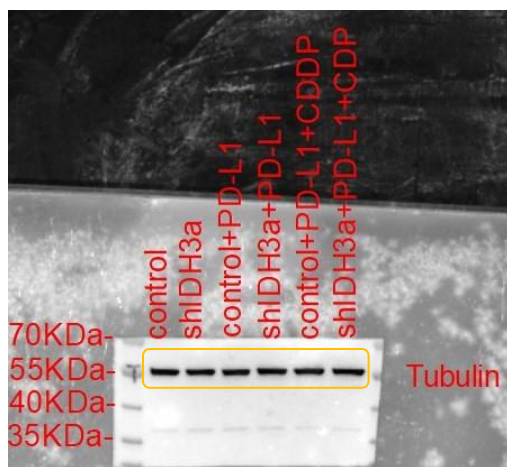


Fig 7I. β -tubulin



Original blots corresponding to Figure S3:

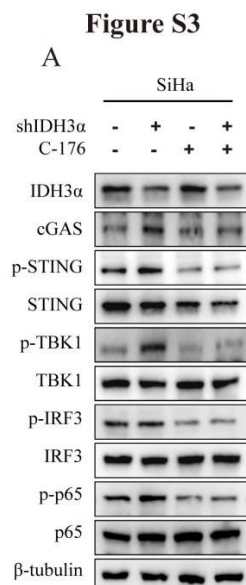


Fig S3A. SiHa IDH3A

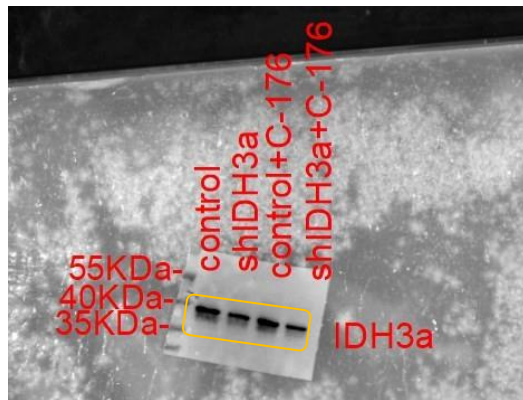


Fig S3A. SiHa cGAS

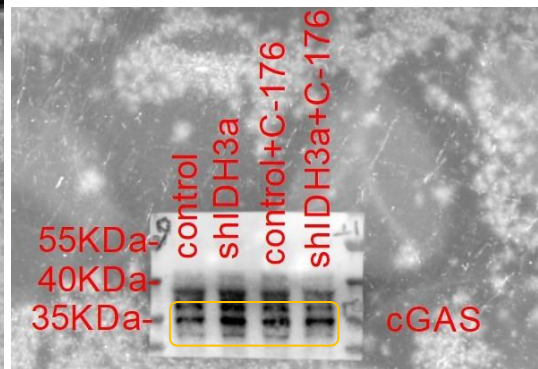


Fig S3A. SiHa p-STING

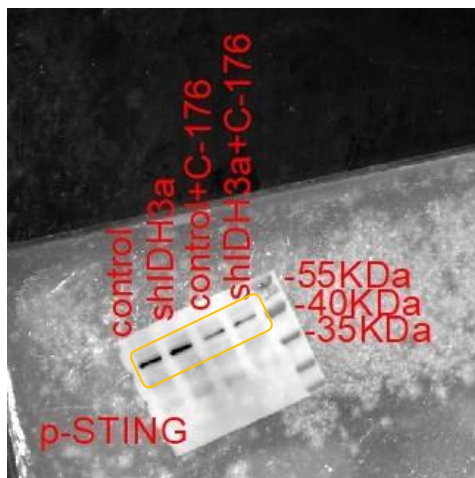


Fig S3A. SiHa STING

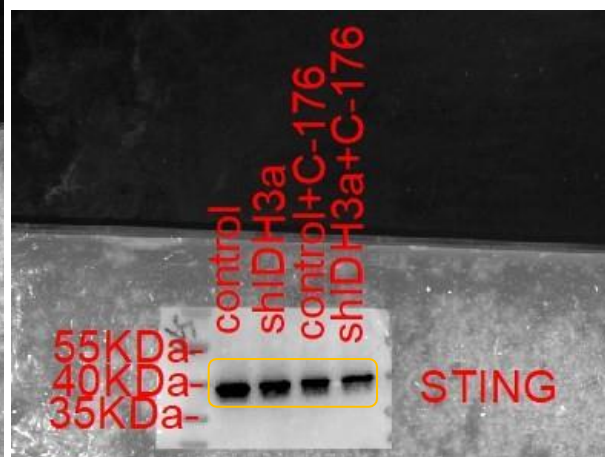


Fig S3A. SiHa p-TBK1

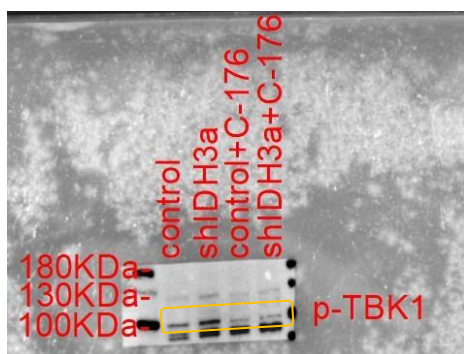


Fig S3A. SiHa TBK1

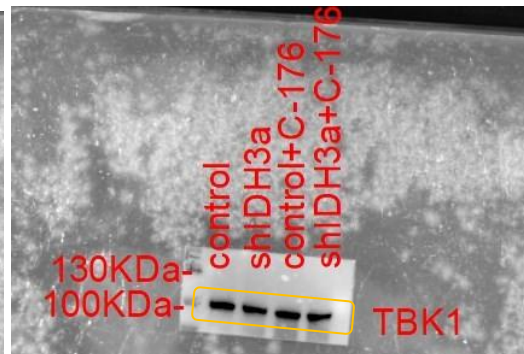


Fig S3A. SiHa p-IRF3



Fig S3A. SiHa IRF3



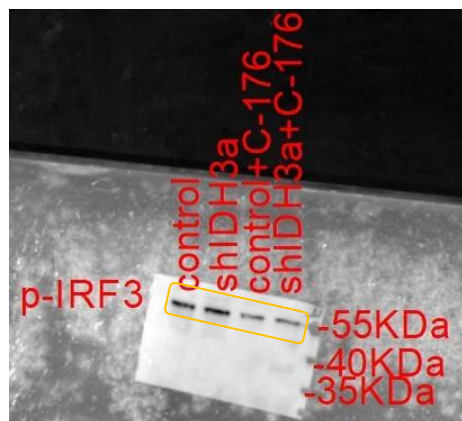


Fig S3A. SiHa p-p65

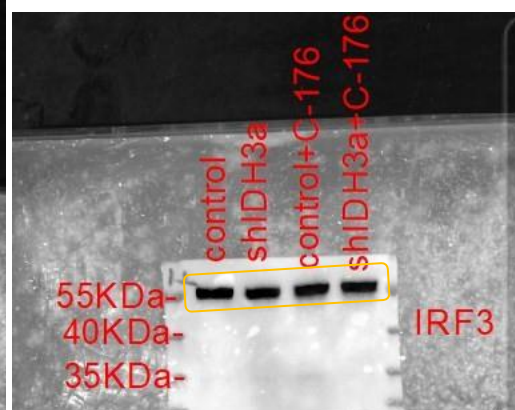


Fig S3A. SiHa p65

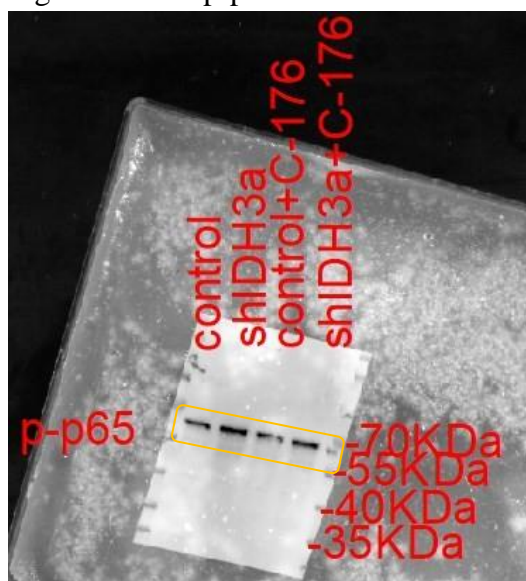
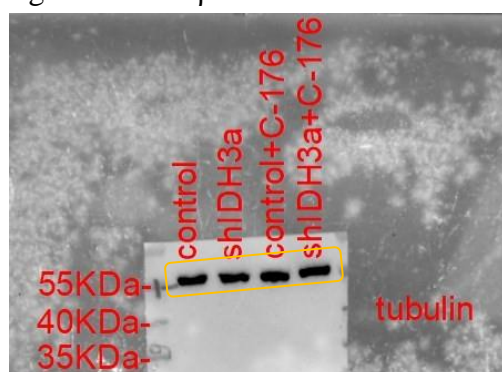
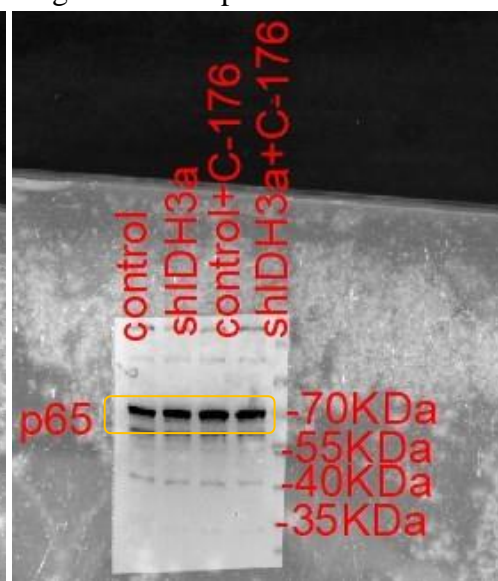


Fig S3A. SiHa β -tubulin



Original blots corresponding to Figure S4:

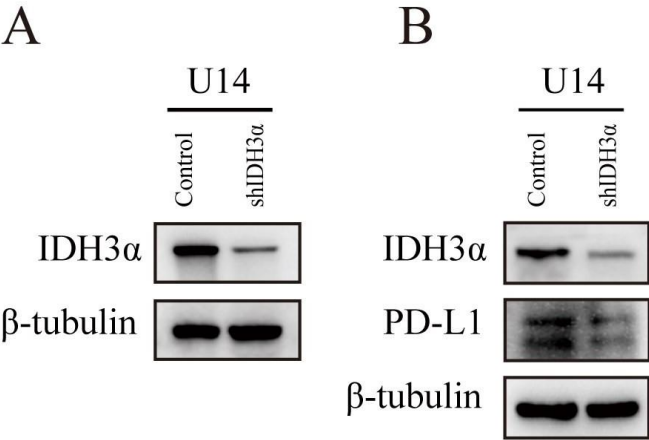


Fig S4A. U14 IDH3α

Fig S4A. U14 β-tubulin

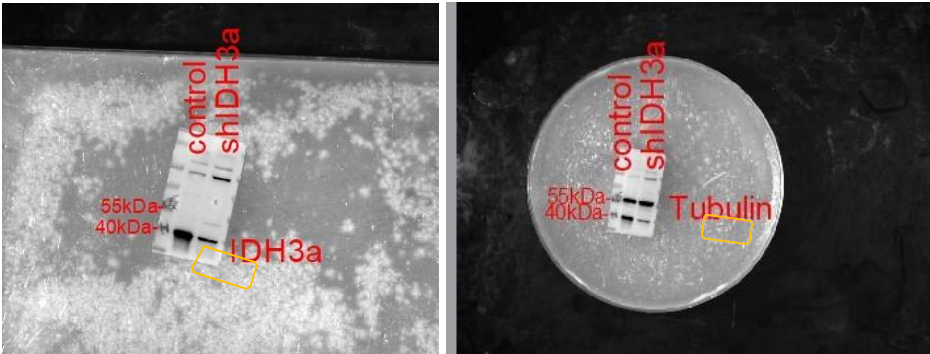


Fig S4B. U14 IDH3α

Fig S4B.U14 PD-L1

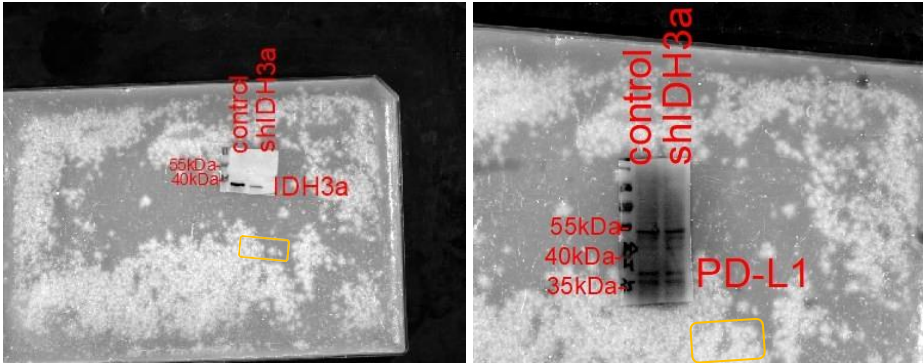


Fig S4B. U14 β-tubulin

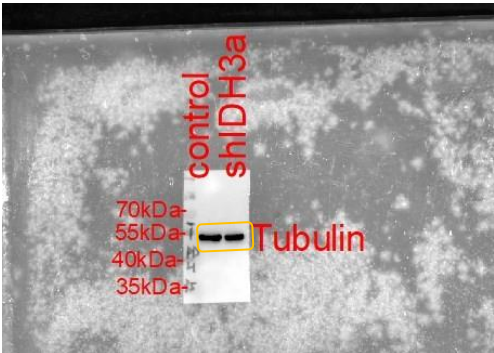


Figure S5: The uncropped Western blots.

Table S1. List of expression primers used in this study

Target	Forward primer	Reverse primer
IDH3α (human)	AATTTTGTAGTCGGTTCATGGG	TCAAGCTCTTTCCGTCCTTAAT
IDH1 (human)	CTATGATGGTGACGTGCAGTCG	CCTCTGCTTCTACTGTCTTGCC
IDH2 (human)	AGATGGCAGTGGTGTCAAGGAG	CTGGATGGCATACTGGAAGCAG
E-cadherin (human)	GCCTCCTGAAAAGAGAGTGGAAG	TGGCAGTGTCTCTCCAAATCCG
N-cadherin (human)	CCTCCAGAGTTTACTGCCATGAC	GTAGGATCTCCGCCACTGATTC
Vimentin (human)	AGGCAAAGCAGGAGTCCACTGA	ATCTGGCGTTCCAGGGACTCAT
Slug (human)	ATCTGCGGCAAGGCGTTTTCCA	GAGCCCTCAGATTTGACCTGTC
LDHA (human)	GGATCTCCAACATGGCAGCCTT	AGACGGCTTCTCCCTCTTGCT
HK2 (human)	GAGTTTGACCTGGATGTGGTTGC	CCTCCATGTAGCAGGCATTGCT
PKM2 (human)	ATGGCTGACACATTCCTGGAGC	CCTTCAACGTCTCCACTGATCG
CXCL1 (human)	AGCTTGCCCTCAATCCTGCATCC	TCCTTCAGGAACAGCCACCAGT
CXCL2 (human)	GGCAGAAAGCTTGCTCAACCC	CTCCTTCAGGAACAGCCACCAA
CCL5 (human)	CCTGCTGCTTTGCCTACATTGC	ACACACTTGGCGGTTCTTTTCGG
CXCL10 (human)	GGTGAGAAGAGATGTCTGAATCC	GTCCATCCTTGGAAGCACTGCA
IFN-β (human)	CTTGGAATCCTACAAAGAAGCAGC	TCCTCCTTCTGGAAGTCTGCA
β-actin (human)	CCTGGCACCCAGCACAAAT	GGGCCGGAATCGTCATAC
IDH3α (mouse)	GCAGGACTGATTGGAGGTCTTG	GCCATGTCCTTGCCTGCAATGT
CXCL1 (mouse)	TCCAGAGCTTGAAGGTGTTGCC	AACCAAGGGAGCTTCAGGGTCA
CXCL2 (mouse)	CATCCAGAGCTTGAGTGTGACG	GGCTTCAGGGTCAAGGCAAAT
CCL5 (mouse)	CCTGCTGCTTTGCCTACCTCTC	ACACACTTGGCGGTTCCCTTCGA
CXCL10 (mouse)	ATCATCCCTGCGAGCCTATCCT	GACCTTTTTTGGCTAAACGCTTTC
β-actin (mouse)	GTGCTATGTTGCTCTAGACTTCG	ATGCCACAGGATTCCATACC