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## Supplemental Information

### **Preeclampsia-Associated lncRNA *INHBA-AS1***

### **Regulates the Proliferation, Invasion, and Migration of Placental Trophoblast Cells**

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## ***SUPPLEMENTAL INFORMATION***

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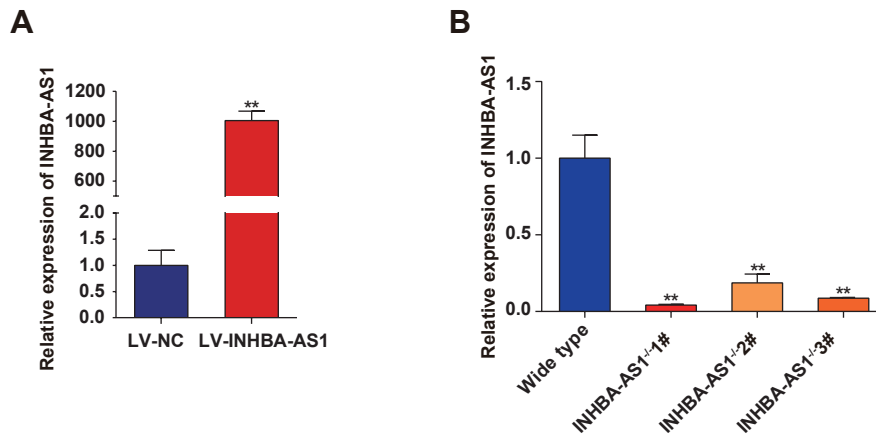
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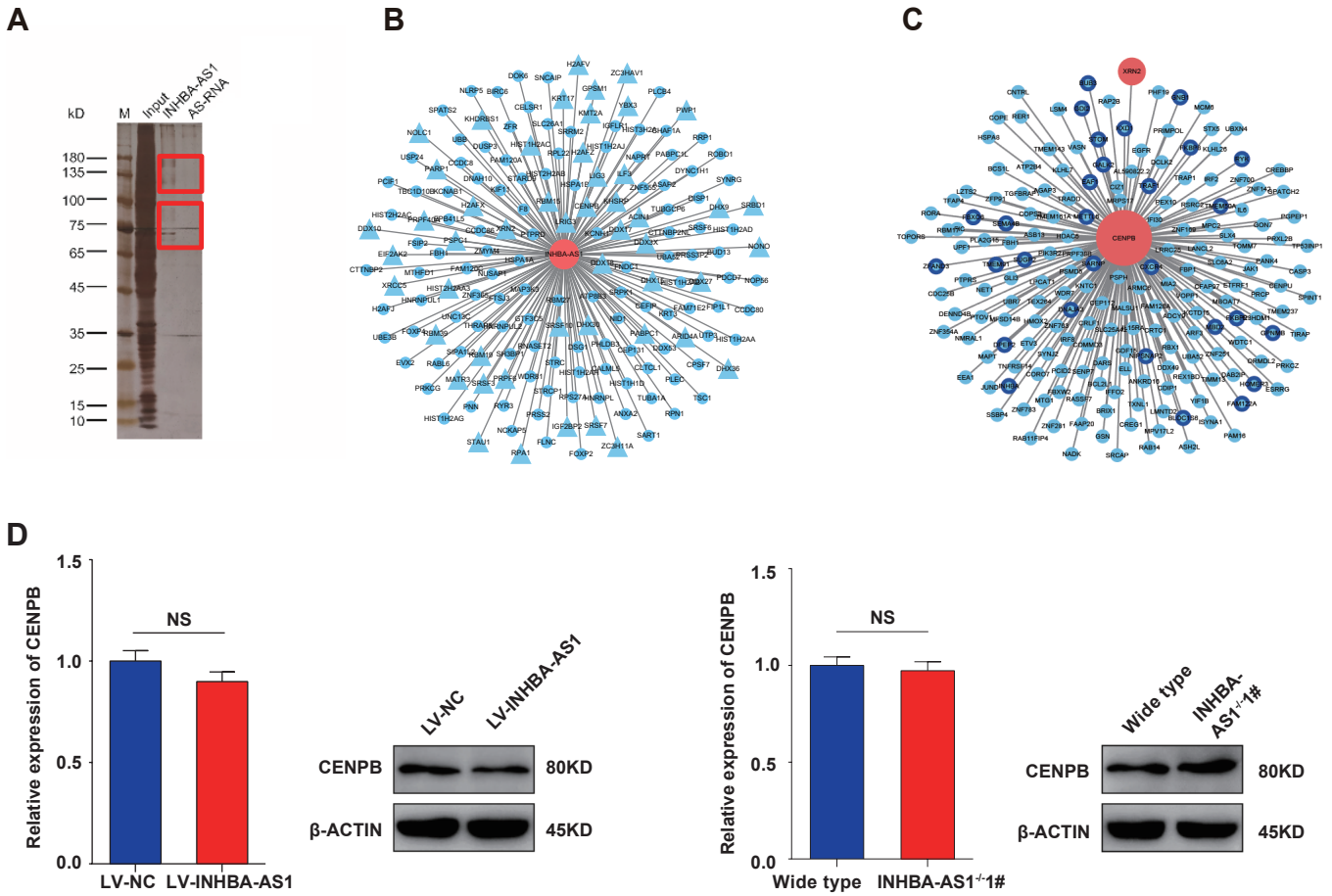
Table S5. Primer sequences. (Refers to Figure1,4,5,6)



**Figure S1. Overexpression and knockout of INHBA-AS1. (Refers to Figure2,3)**

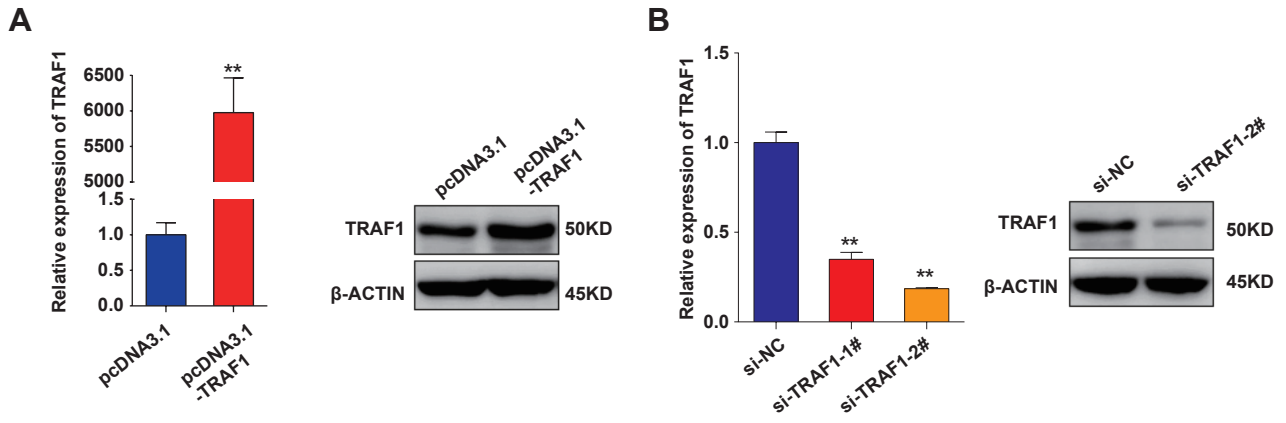
(A) INHBA-AS1 expression in HTR-8/SVneo cells, detected by qRT-PCR: Red bar: cells transfected with full-length human INHBA-AS1; blue bar: cells transfected with empty vector. (B) INHBA-AS1 expression in HTR-8/SVneo cells, detected by qRT-PCR. Red bars: INHBA-AS1 knockout by CRISPR/Cas9; blue bar: without knockout.

LV represents Lentivirus, NC represents normal control. The values are shown as the mean  $\pm$  SD of three independent experiments; \*\*P<0.01.



**Figure S2. INHBA-AS1 binding proteins. (Refer to Figure4)**

(A) The silver staining of the proteins pulled down by INHBA-AS1 in polyacrilamide gel. (B) Network of INHBA-AS1 and its binding proteins detected by pulldown and mass spectrometry. (C) Network of transcription factor CENPB and its target genes. (D) Expression level of transcription factor CENPB in HTR-8/SVneo cells with INHBA-AS1 overexpression or knockout. Left panel: qRT-PCR results; right panel: western blotting results. LV represents Lentivirus, NC represents normal control. The values are shown as the mean  $\pm$  SD of three independent experiments.



**Figure S3. The Efficiency after overexpression or knockdown of TRAF1 in HTR-8/SVneo. (Refer to Figure6)**

(A) The expression of TRAF1 in HTR8/SVneo cells with TRAF1 over-expression. Left panel: qRT-PCR results; right panel: western blotting results. (B) The expression of TRAF1 in HTR8/SVneo cells with TRAF1 knockdown. Left panel: qRT-PCR results; right panel: western blotting results. NC represents normal control. The values are shown as the mean  $\pm$  SD of three independent experiments; \*\*P<0.01.

### **Supplemental table legends**

Tables S1-S5 are uploaded separately as excel files.

Table S1. INHBA-AS1-protein-interactions. (Refers to Figure1)

Sheet1. INHBA-AS1-protein-interactions collected from databases and predicted by catRAPID omics.

Sheet2. The enrichment pathways of DEG of INHBA-AS1-TF targeting genes.

Table S2. Mass spectrometry results of INHBA-AS1 pulldown. (Refers to Figure4)

Table S3. Targets of TFs interacting with INHBA-AS1. (Refers to Figure4)

Sheet1. All TFs interacted with INHBA-AS1 and corresponding target genes.

Sheet2. All TFs and corresponding target genes which differentially expressed in EOSPE.

Sheet3. Targets of transcription factor interacting with INHBA-AS1 enriched with DEGs in EOSPE.

Table S4. Top 20 TFs in “INHBA-AS1-TF-target” network based on the node betweenness centrality.

(Refers to Figure4)

Table S5. Primer sequences. (Refers to Figure1,4,5,6)