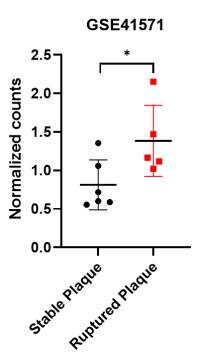
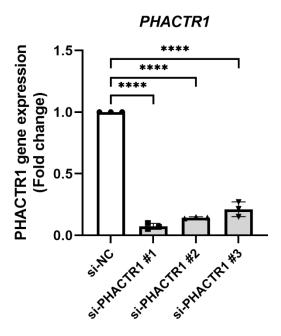
## **Supplemental Materials**

#### **Supplemental Figure 1**



**Figure S1.** *PHACTR1* gene expression was upregulated in macrophage-rich regions of ruptured human atheromatous plaques (using laser microdissection), compared with that of stable plaques by mining GEO datasets (GSE41571) [23].

#### **Supplemental Figure 2**



**Figure S2.** HUVECs were transfected with control siRNA (si-NC) or three independent siRNAs (#1-#3) targeting human PHACTR1 for 48 h before RNA was collected for real-time PCR analysis, n=3. After validation, si-PHACTR1#1 was selected for functional assays in this study. \*\*\*\*P<0.0001.

### **Supplemental Table 1-Primer sequence**

| Primers     | Sequences               |
|-------------|-------------------------|
|             | •                       |
| hNOS3-S     | CCGGAACAGCACAAGAGTTA    |
| hNOS3-AS    | GTCTGTGTTACTGGACTCCTTC  |
| hKLF2-S     | GCCGTCCTTCTCCACTTTC     |
| hKLF2-AS    | GAAGTCCAGCACGCTGTT      |
| hKLF4-S     | GTAGTGCCTGGTCAGTTCATC   |
| hKLF4-AS    | GAACCCACACAGGTGAGAAA    |
| hVCAM1-S    | GATTGGTGACTCCGTCTCATT   |
| hVCAM1-AS   | CCTTCCCATTCAGTGGACTATC  |
| hICAM1-S    | CCTCAGCACGTACCTCTATAAC  |
| hICAM1-AS   | GGCTTGTGTGTTCGGTTTC     |
| hGAPDH-S    | GTCAACGGATTTGGTCGTATTG  |
| hGAPDH-AS   | TGTAGTTGAGGTCAATGAAGGG  |
| hPHACTR1-S  | GGAACTGGAACAGAGGAACAT   |
| hPHACTR1-AS | TTGACTGAGCTTTCGGGTTAG   |
| hPHACTR2-S  | GGAGGAACAGGCAGAAGATAAG  |
| hPHACTR2-AS | TAGGCTTAGGAGGAGCAGAA    |
| hPHACTR3-S  | GCGCTGAACGACTCCATTAT    |
| hPHACTR3-AS | CCGGTCTTCTAGTTCCTGTTTG  |
| hPHACTR4-S  | CATTCCATCAACCTCAGTACCC  |
| hPHACTR4-AS | GTAGTAGTTCCGAGCCCATAGA  |
| hET1-S      | CAAGCAGGAAAAGAACTC      |
| hET1-AS     | CTGGTTTGTCTTAGGTGTTC    |
| hSELE-S     | GTGTATGTCCTCTGGAGAATGG  |
| hSELE-AS    | GAACCCATTGGCTGGATTTG    |
| mGAPDH-S    | AGGTCGGTGTGAACGGATTTG   |
| mGAPDH-AS   | TGTAGACCATGTAGTTGAGGTCA |
| mPHACTR1-S  | GAGGAGAAGCGGGAAATCAA    |
| mPHACTR1-AS | GTAGTCACTGAAGCGGATAAGG  |
|             |                         |

### Supplemental Table 2-Antibodies and sources

| Antibody    | Catlog# and Vendor                         |
|-------------|--|
| PHACTR1     | #23446-1-AP, Proteintech; #ab229120, Abcam |
| VCAM1       | #383318, Zenbio                            |
| ICAM1       | #200350-F12, Zenbio                        |
| GAPDH       | #60004-1-lg, Proteintech                   |
| eNOS-pS1177 | #612393, BD Biosciences                    |
| eNOS        | #610297, BD Bioscience                     |
| Akt         | #342529, Zenbio                            |
| Akt-pS473   | #381555, Zenbio                            |
| FLAG        | #250111, Zenbio                            |
| HSPA8       | #ET1602-33, Huabio                         |
|             |  |

Supplemental Table 3-PHACTR1 interactomics, please see separate excel spreadsheet in online supplemental material.

# Uncropped full gels scan

Figure 2C

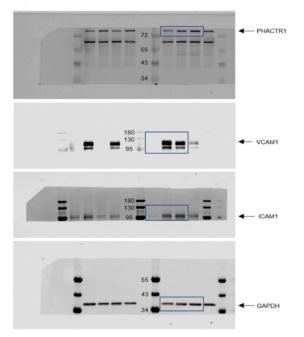


Figure 2E

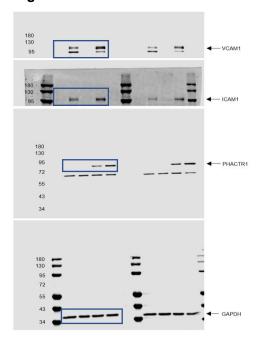


Figure 2F

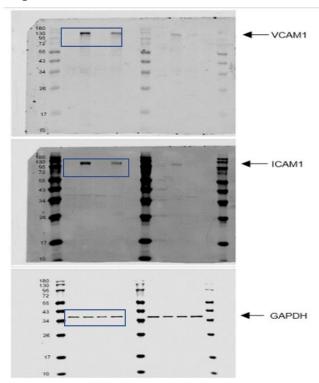


Figure 3B

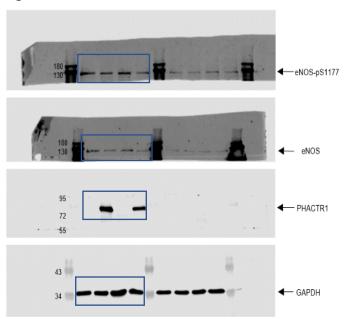


Figure 3D

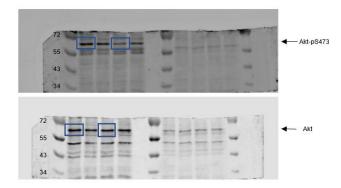


Figure 6B

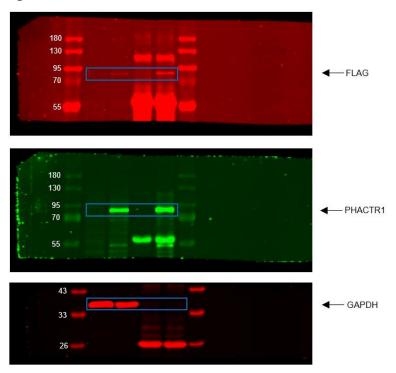


Figure 6F

