

Table S1. Information of glioma cell lines.

| Name | Database Name/ Accession Numbers | Domain | Source |
|-----------------------|--|---------------|--|
| Ln18 | ATCC / CRL-2610 | Cell Line | Homo sapiens (human) brain; glioblastoma |
| DBTRG-05MG (DBTRG) | Bioresource Collection and Research Center (BCRC), Taiwan / BCRC Number: 60380 | Cell Line | Homo sapiens (human) brain; glioblastoma |
| U251-MG (U251) | Kerafast, Inc. / Number: EDK001 | Cell Line | Homo sapiens (human) brain; glioblastoma |
| A172 | ATCC / CRL-1620 | Cell Line | Homo sapiens (human) brain; glioblastoma |
| U-118 MG (U118) | ATCC / HTB-15 | Cell Line | Homo sapiens (human) brain; glioblastoma |
| GBM8401 | Obtained from Dr. Wei-Hwa Lee, Tri-service General Hospital, Taipei, Taiwan. BCRC Number: 60163 | Cell Line | Homo sapiens (human) brain; glioblastoma |
| GBM8901 | Obtained from Dr. Wei-Hwa Lee, Tri-service General Hospital, Taipei, Taiwan. BCRC Number: 60164 | Cell Line | Homo sapiens (human) brain; glioblastoma |
| GL261 | Leibniz Institute DSMZ / Number: ACC 802 | Cell Line | Mus musculus (Mouse) Breed/subspecies: C57BL/6. Mouse glioblastoma |

Table S2. Quantitative PCR primer and siRNA sequence list

| Symbol | Gene name | Used | Sequence (5'-3') |
|--------------|-----------------------------------|-------|------------------------------|
| <i>CHSY1</i> | Chondroitin Sulfate Synthase 1 | qPCR | F: GGCACGCGTATTTACAGCAG |
| | | qPCR | R: TTGTGCTCACTCTTCGACCC |
| <i>ITGB1</i> | Integrin Subunit Beta 1 | qPCR | F:GCCGCGCGGAAAAGATG |
| | | qPCR | R:GAATTTGTGCACCACCCACAA |
| <i>ACTB</i> | Actin, beta | qPCR | F: CACCATTGGCAATGAGCGGTTC |
| | | qPCR | R: AGGTCTTTGCGGATGTCCACGT |
| <i>CHSY1</i> | Chondroitin Sulfate Synthase 1 | siRNA | GGCAAGUGUCUCCGGGAAA |
| | | siRNA | AUUCCAAAUCUGAACGUGA |
| | | siRNA | GACAAGUACGAAUGGUUUA |
| | Non-target | siRNA | GAGAUUACCGAGUCAAGUA |
| | | siRNA | UGGUUUACAUGUCGACUAA |
| | | siRNA | UGGUUUACAUGUUGUGUGA |
| | | siRNA | UGGUUUACAUGUUUUCUGA |
| | | siRNA | UGGUUUACAUGUUUCCUA |

Figure S1.

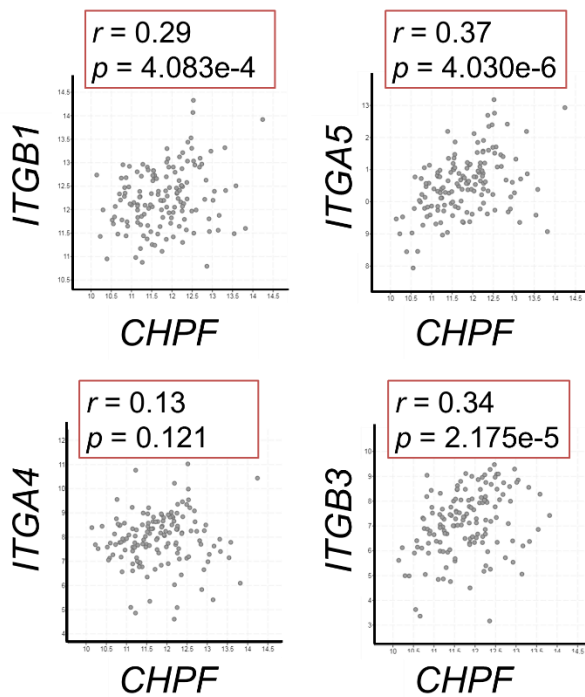


Figure S1. Correlation of *CHPF* and integrins expression in human glioblastoma cases. *CHPF* gene expressions compared with *ITGB1*, *ITGB3*, *ITGA4*, and *ITGA5*. Data were collected from cBioPortal database, and analyzed by Pearson's correlation.

Figure S2.

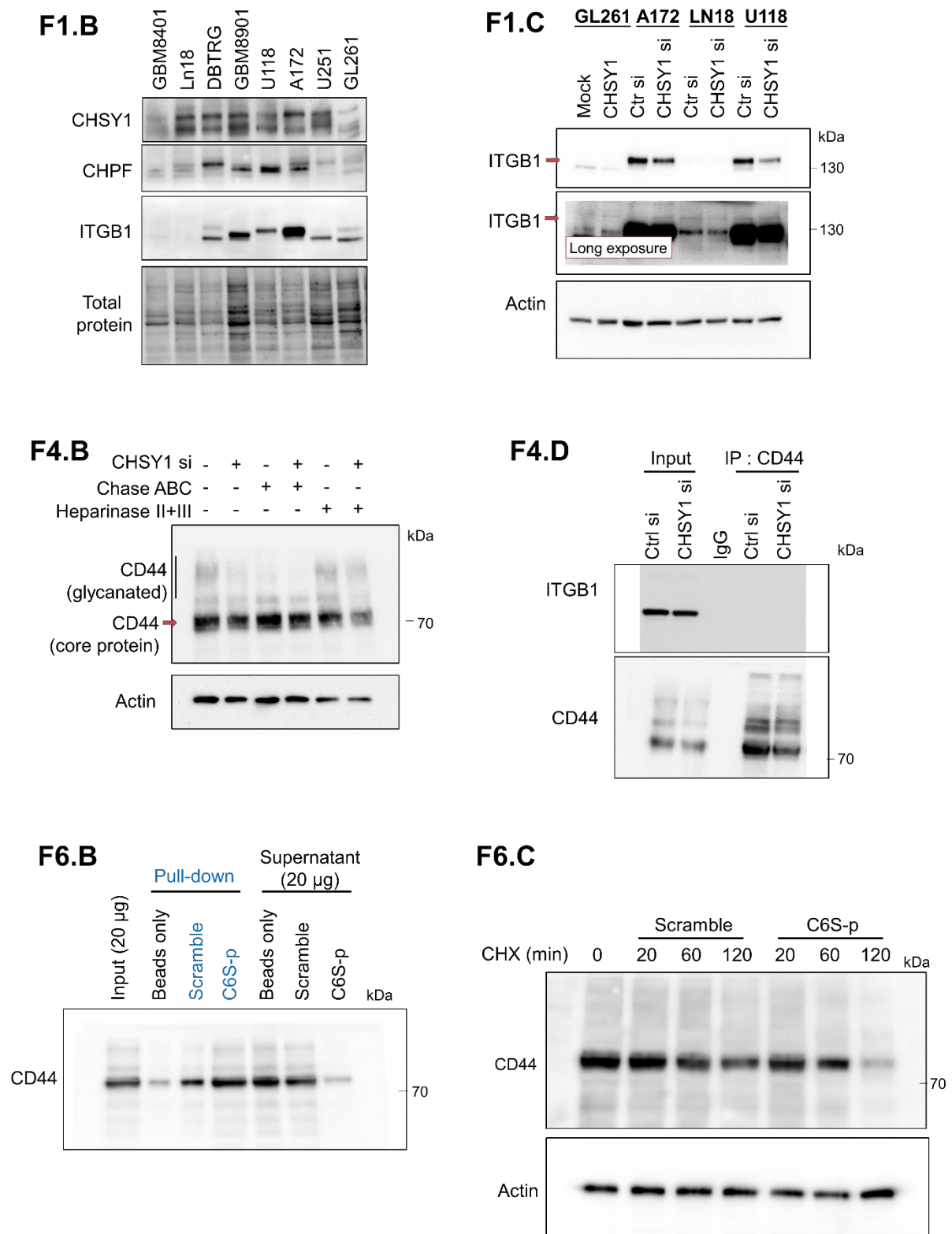


Figure S2. Original images of western blots