

Figure S1. Total expression of GRK2, EP4 and G $\beta$  in synovial tissues of patients with RA detected by western blot analysis. \*\*\*P<0.001 vs. trauma group (n=6). GRK2, G protein coupled receptor kinase 2; EP4, prostaglandin E4 receptor; RA, rheumatoid arthritis.

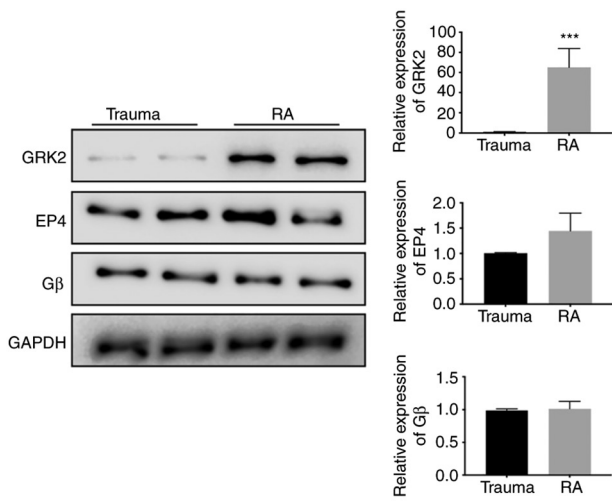


Figure S2. Validation of RA-FLS and AA-FLS by immunofluorescence. Scale bars, 100  $\mu\text{m}$ . RA, rheumatoid arthritis; AA, adjuvant-induced arthritis; FLS, fibroblast-like synoviocytes.

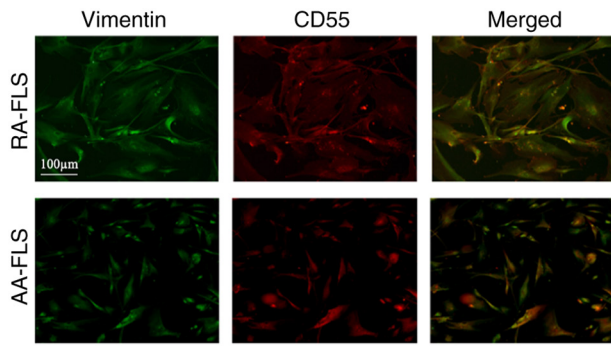


Figure S3. Expression of G $\beta$  in MH7A cells determined by western blot analysis (n=5). PGE<sub>2</sub>, prostaglandin E2.

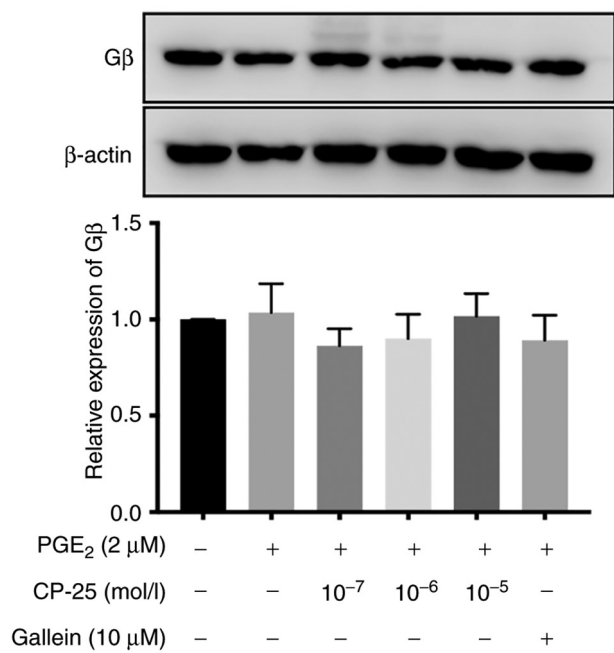


Figure S4. Relative expression of GNB1 mRNA and GNB2 mRNA in synovial tissue of patients with RA was evaluated using quantitative PCR. \*\*\*P<0.001 vs. trauma group (n=6). RA, rheumatoid arthritis. GNB, guanine nucleotide-binding protein subunit beta.

Primer	Sequence 5'-3'
GNB1F	TCGTCTCTGGTGCTTGTGATGC
GNB1R	GTCGTCTGAGCCAGTGGCAAAT
GNB2F	TGTTGCCGCTTCTGGATGACA
GNB2R	CACTGTGTCCAGCAAAACCCAC

