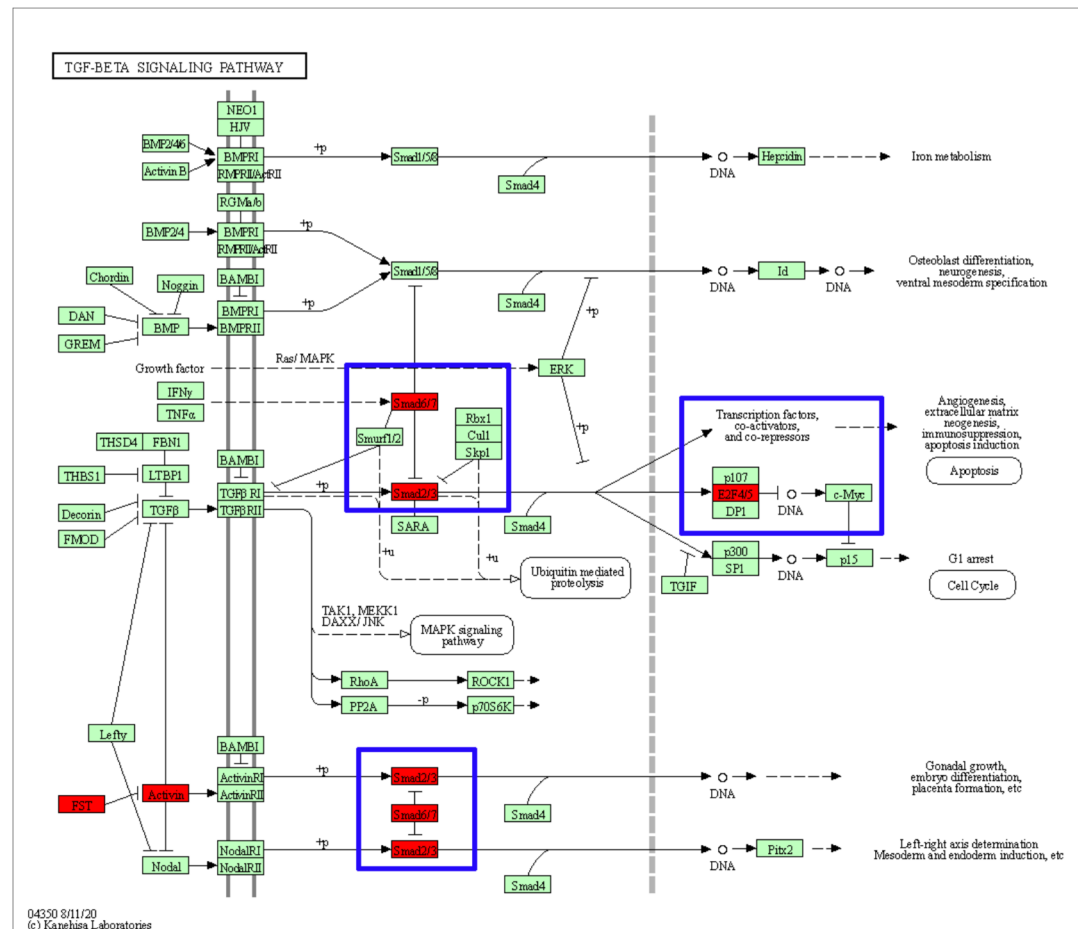
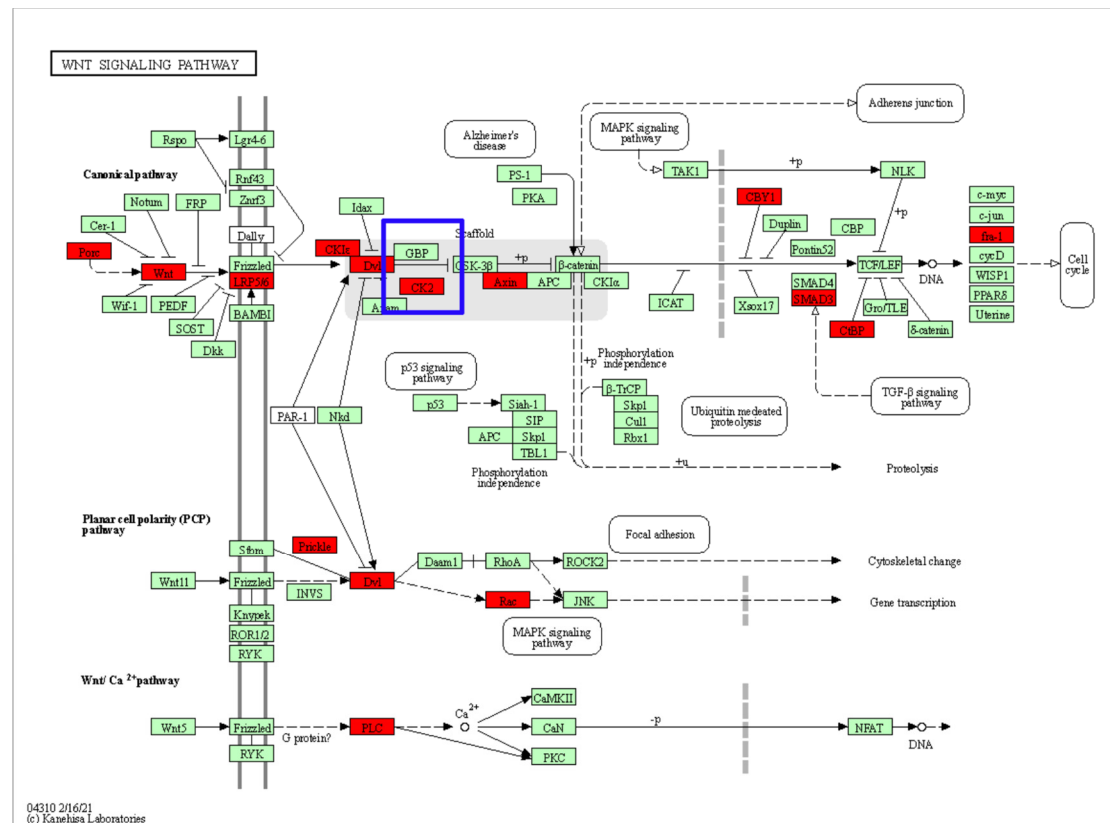


**Figure S1. Differential gene enrichment analysis by KEGG.**





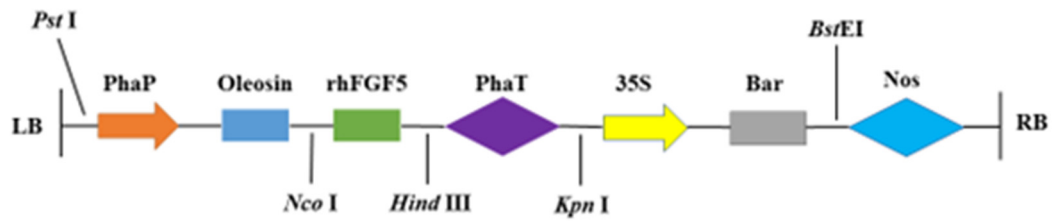
**Figure S3. The recombinant oil body expressing hFGF5 regulates E2F4, E2F5, Smad7 and participates in TGF- $\beta$  pathway. The blue box indicates that the target gene is involved in the regulation process, and the red marked gene indicates that the up-regulation of gene expression induced by ROBF5 treatment may be involved in the TGF- $\beta$  pathway.**



**Figure S4. The recombinant oil body expressing hFGF5 regulates CSNK1 and participates in Wnt pathway.** The blue box indicates that the target gene is involved in the regulation process, and the red marked gene indicates that the up-regulation of gene expression induced by ROBF5 treatment may be involved in the Wnt pathway.







**Figure S7. pOTB-hFGF5 expression vector.** PhaP: phaseolin promoter; Oleosin: Arabidopsis thaliana oleosin gene; hFGF5: human fibroblast growth factor 5; PhaT: phaseolin terminator; 35S: CaMV35S promoter; Bar: the glufosinate resistance gene; Nos: Nopaline synthase terminator.

**Table S1. Sequence of primers.**

<b>Primer</b>	<b>Sequence of primers 5'to3'</b>
1-E2F5-F	GAAATGGGTCAGAATGGACAAAA
1-E2F5-R	AACCACGGGCTTAGATGAACTC
2-ID2-F	GAACAAGAAGGTGAGCAAGATGG
2-ID2-R	CTGACAATAGTGGGATGCGAGT
3-BAX-F	TCCCACCTTCCTAAATGTCTGTC
3-BAX-R	GCATCCACCGCACACTAAAGA
4-SMAD7-F	GGGAGGAGAAGACGAGAGTGG
4-SMAD7-R	CTTGTTGTCCGAATTGAGCTGT
5-E2F4-F	TGGAAGGTATCGGGCTAATCG
5-E2F4-R	ATGAGTGACGTAGGCCAAAGTGT
6-CSNK1E-F	TTCAACTTCTGTTCCCGCAA
6-CSNK1E-R	GTGGATGAAGTTCTTGAGTGGA
7-PIK3R3-F	CTCTCCACCAAAGCCACCTAA
7-PIK3R3-R	TTGAAATATCCCCCAGTACCA
8-SOS1-F	GGAACTATTCTTCTACCCCATGG
8-SOS1-R	CTCCACCTAAGGGCATCCAA