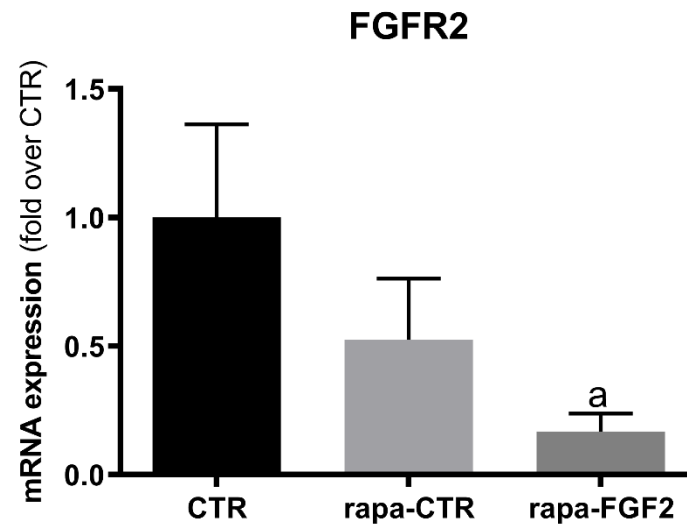
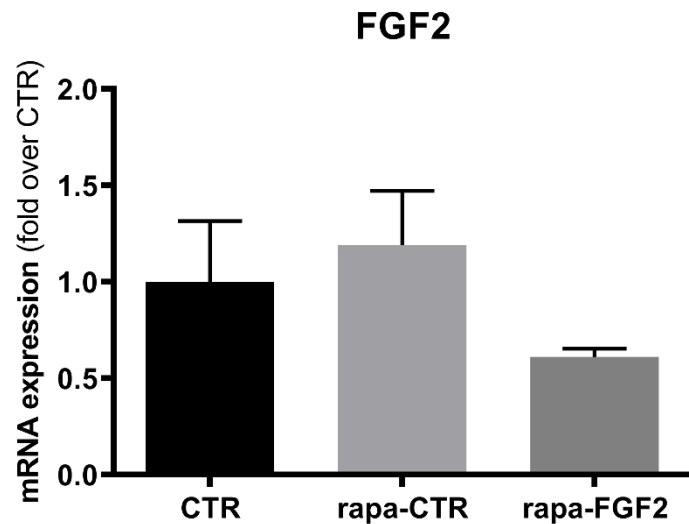
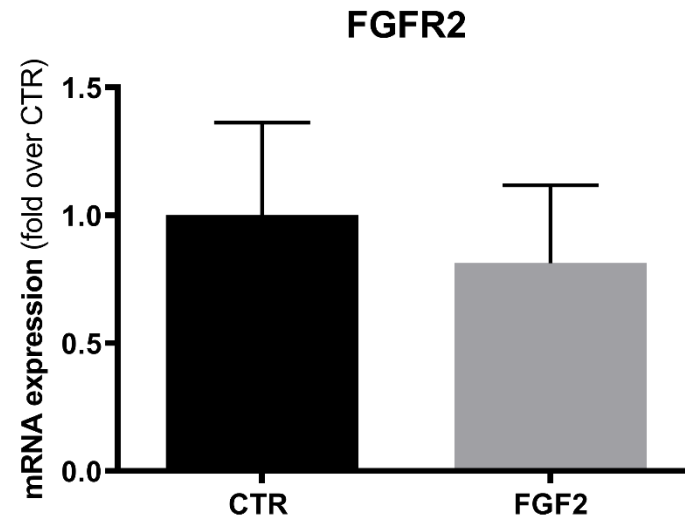
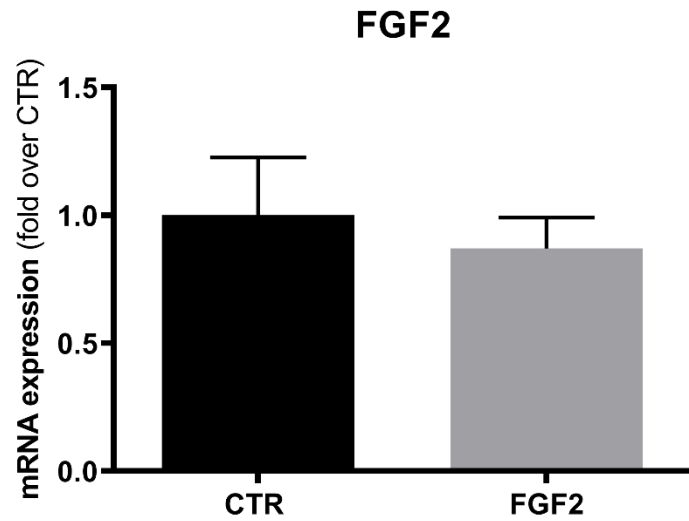
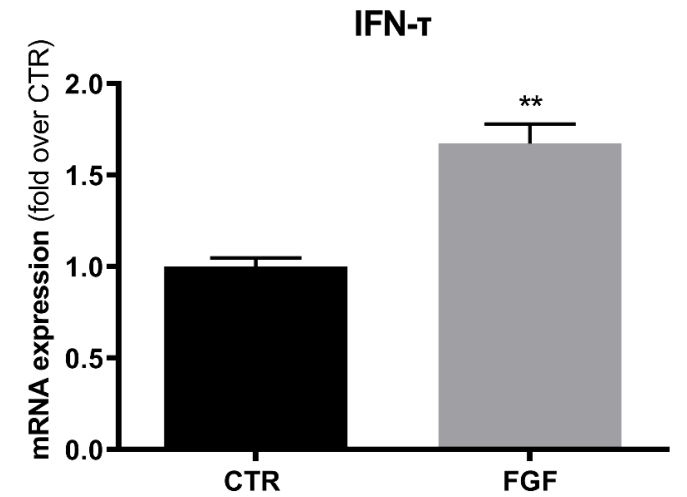


A

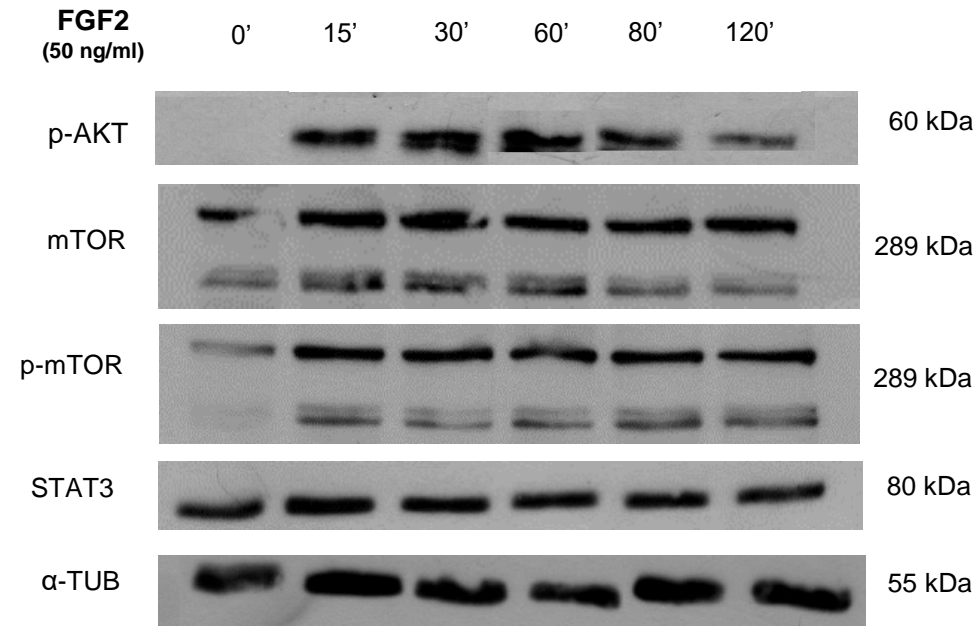


B



**Supplementary Figure 1A. Expression of FGF2, FGFR2**  
 FGF2 and FGFR2 gene expression was analysed after 50 ng/ml FGF2 and 100nM rapamycin 24h treatment. Data were expressed as mean  $\pm$  standard deviation and analysed using nonparametric Mann-Whitney t-test or one-way Anova if the sample groups were more than two. Results showed that FGF2 expression was not influenced by FGF2 supplementation and mTOR-inhibition, whereas FGFR2 was significantly down-regulated in rapamycin-treated oTCs.

**Supplementary Figure 1B. IFN- $\tau$  after 4-day FGF2 treatment.** IFN- $\tau$  gene expression was analysed after 4-Day 50 ng/ml FGF2 treatment. Data were analysed using nonparametric Mann-Whitney t-test and the result was shown as mean  $\pm$  standard deviation ( $p < 0.01$ ). The graph reports that FGF2 supplementation seems to have a positive effect on the IFN- $\tau$  expression when oTCs were exposed for a long period of time.



**Supplementary Figure 2.** Time-dependent effect of FGF2 on the expression of AKT/mTOR signaling pathway in oTCs. Western blot analysis was employed to assess whether FGF2 affected mTOR phosphorylation status. STAT3 and  $\alpha$ -TUB were used as reference proteins. Serum-starved oTCs were incubated with 50 ng/ml FGF2 for 0 – 120 min. The analysis shows AKT-mTOR activation is enhanced by FGF2.

**Supplementary Table 1.** List of primer pairs used for gene expression analysis.

<b>Target Gene</b>	<b>Forward</b>	<b>Reverse</b>	<b>Product length</b>
Cytokeratin -7 (CK7)	AAG GAC GTG GAT GTT GCC TA	TGA TGC TCT CCA AGT CCA GG	187
Epithelial -cadherin (CDH1)	TAC TAT GAT GAA GAA GGA GGT GGA	CAA TAA AGT TTC CAA TTT CAT CAG G	175
Ovine placental lactogen (oPL)	AGC AAC AAC GGT GGC TAA CT	GCC ATA CTG TTC ATC AAA TCT GTT	73
Interferon -tau (IFN – $\tau$ )	CTC TGC ACT GGA CTC CAA CA	CGC TGT ATC CCT TCT CTT GC	160
Pregnancy associated glycoprotein (PAG)	GCA GTG TGG TGA TGT TTG GT	TAC AAT CCA GTC ACC CGC TT	92
Fibroblast growth factor -2 (FGF2)	GGG GTT GTG TCT ATC AAA GGA G	GTG CCA CAT ACC AAC TGG AGT A	172
Fibroblast growth factor receptor -2 (FGFR2)	CCT GCG GAG ACA GGT AAC AG	GCA GCT CAT ACT CGG AGA CC	137
Ribosomal protein L32 (RPL32)	AAAATCAAGCGGAACTGGCG	GGCATCAAGATCTGGCCCTT	80
Ribosomal protein S9 (RPS9)	CAAGTCCATCCACCATGCCC	GACGGGATGTTACCCACCTG	78