Supplementary Figure 1: Prolonged TNFα synergizes with interferons (IFN) for induction of *CXCL9* and *CXCL11* in RA FLS. (**A**-**B**), RA FLS were cultured for 3 days in the presence or absence of TNFα (10 ng/ml), which was added on the first day of culture and was not replenished. On day 3 the cells were stimulated with IFNβ (1,000 U/ml) or IFNγ (100 U/ml) for 3 hours. The expression of CXCL9/MIG (**A**) and CXCL11/ITAC (**B**) mRNA was measured by real-time quantitative reverse transcription-polymerase chain reaction (qPCR). Values are the mean ±SEM and were normalized relative to mRNA for GAPDH. *= $p<0.05$, **=$p<0.01$, and ***=$p<0.001$, by one-tailed paired Student *t* test. (**C**), *CXCL9*, *CXCL10* and *CXCL11* genes are located next to each other on the long arm of chromosome 4.

Supplementary Figure 2: Priming effect of TNFα on interferon responses of RA FLS is gene specific. RA FLS were cultured for 3 days in the presence or absence of TNFα (10 ng/ml), which was added on the first day of culture and was not replenished. On day 3 the cells were stimulated with IFNβ (1,000 U/ml) or IFNγ (100 U/ml) for 3 hours. The mRNA expression of classic interferon-targets including SOCS1 (**A**), STAT1 (**B**), IRF1 (**C**) and IFIT2/ISG54 was measured by real-time quantitative reverse transcription-polymerase chain reaction (qPCR). Values are the mean ±SEM and were normalized relative to mRNA for GAPDH.

Supplementary Figure 3: STAT1-amplifier function of prolonged TNFα is retained in RA FLS despite the removal of TNFα. RA FLS were cultured for 3 days in the

presence or absence of TNFα (10 ng/ml), which was added on the first day of culture and was not replenished. Then inflammatory input was removed by washing cells, adding new medium and blocking any residual TNFα with infliximab (10μg/ml). Following a weaning period of 24 hours, cells were stimulated with IFNβ (1,000 U/ml) (**A**) or IFNγ (100 U/ml) (**B**) for 0-60 minutes. STAT1 tyrosine phosphorylation (pY) and total STAT1 protein were measured by immunoblotting. AKT was used as loading control. Results are representative of three independent experiments.