Supplemental Data

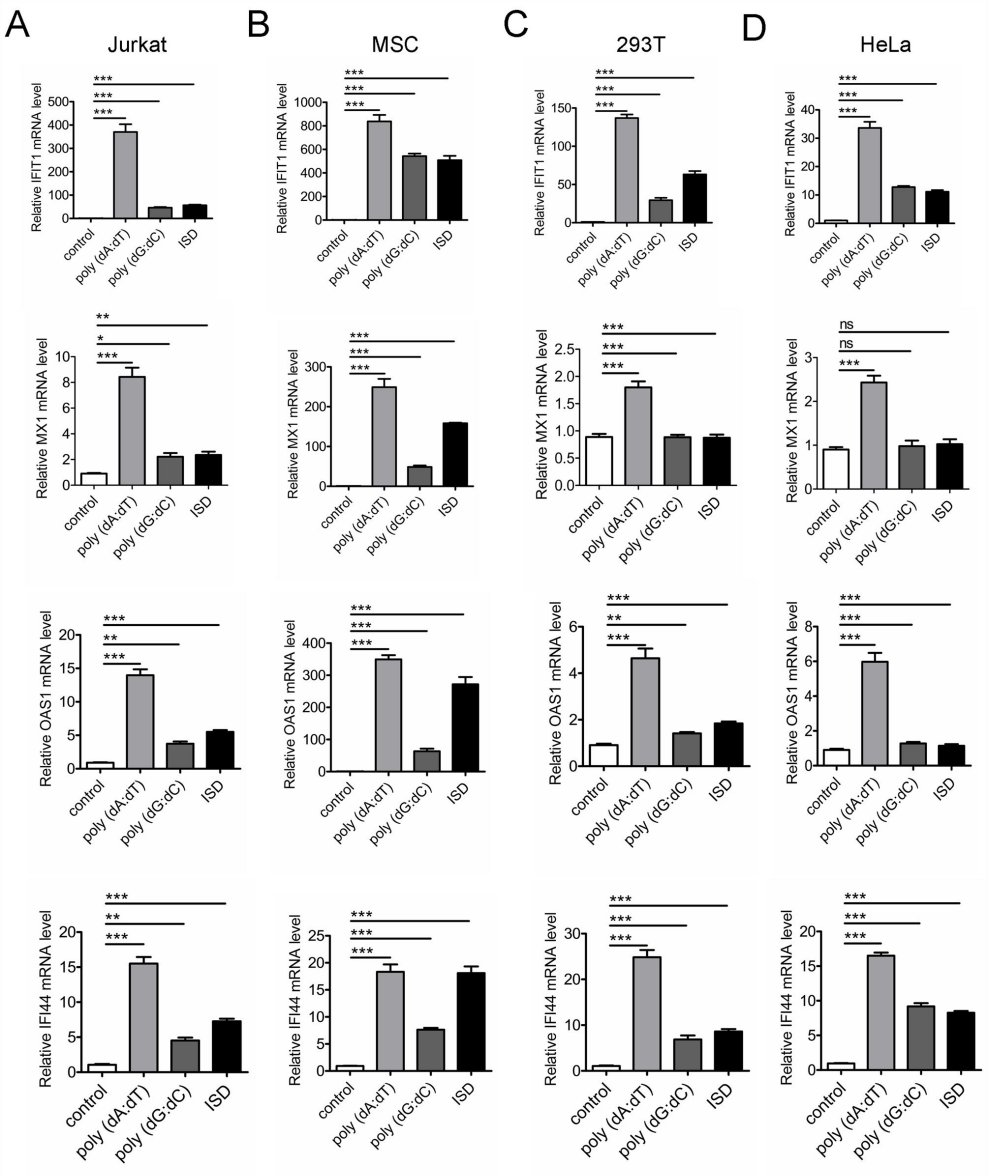

Fig. S1. dsDNA promotes the expression of IFIT1, MX1, OAS1 and IFI44 in Jurkat, hMSC, 293T and HeLa cells. Jurkat, hMSC, 293T and HeLa cells were transfected with poly(dA:dT) (2 μg/ml), poly(dG:dC) (2 μg/ml) or ISD (2 μg/ml) for 6 h. qPCR analysis of the expression levels of IFIT1, MX1, OAS1 and IFI44 in Jurkat (A), Human MSC (B), HEK293T (C) and HeLa (D). Data shown are the mean of 3 independent experiments; error bars represent s.e.m. *p<0.05, **p<0.01, ***p<0.001; ns denotes p>0.05.

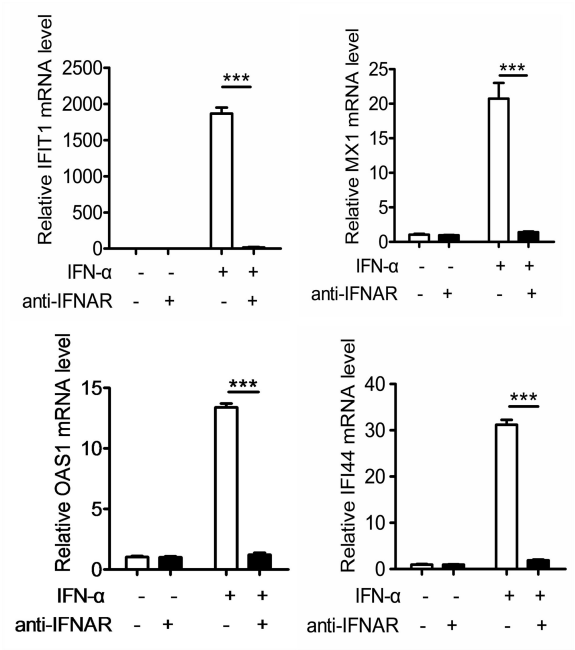

Fig. S2. Anti-IFNAR neutralizing antibody inhibits IFN-α-induced expression of IFIT1, MX1, OAS1 and IFI44 in BJAB cells. BJAB cells were treated with the neutralizing antibody for the IFN-α/β receptor (Merck & Millipore) for 30 min prior to stimulation with IFN-α for 6 h. The expression levels of IFIT1, MX1, OAS1 and IFI44 were detected by qPCR. Data shown are the mean of 3 independent experiments; error bars represent s.e.m. *p<0.05, **p<0.01, ***p<0.001; ns denotes p>0.05.

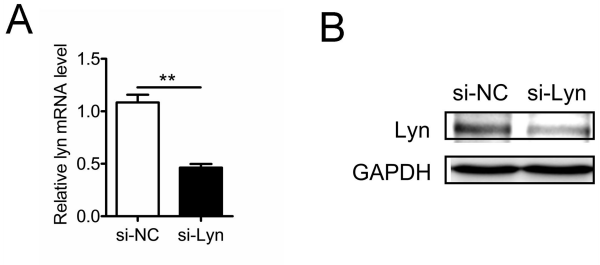

Fig. S3. Lyn knockdown in BJAB cells. (A and B) BJAB cells were transfected with si-Lyn or si-NC for 36 h and were then harvested for qPCR and western blot analysis. Data shown are the mean of 3 independent experiments; error bars represent s.e.m. *p<0.05, **p<0.01, ***p<0.001; ns denotes p>0.05.

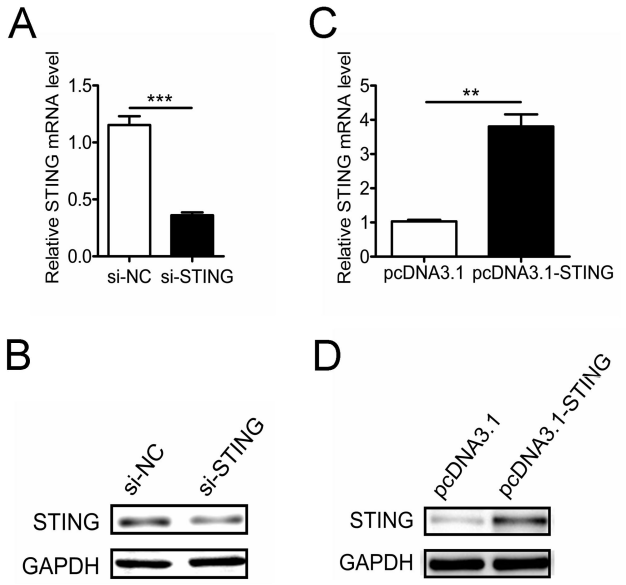

Fig. S4. Overexpression and knockdown of STING in BJAB cells. (A and B) BJAB cells were transfected with si-STING or si-NC for 36 h and were then harvested for qPCR and western blot analysis. (C and D) BJAB cells were transfected with pcDNA3.1-STING or control plasmid for 36 h and were then harvested for qPCR and western blot analysis. Data shown are the mean of 3 independent experiments; error bars represent s.e.m. *p<0.05, **p<0.01, ***p<0.001; ns denotes p>0.05.

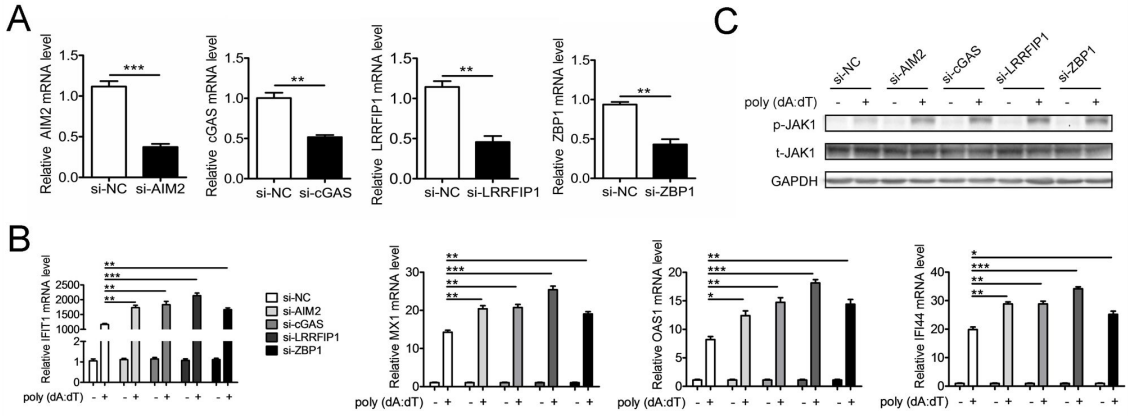

Fig. S5. DNA sensors, including AIM2, cGAS, LRRFIP1 and ZBP1, negatively regulate poly(dA:dT)-triggered activation of JAK1-STAT1 signaling. (A) BJAB cells were transfected with si-AIM2, si-cGAS, si-LRRFIP1 or si-ZBP1 for 36 h. qPCR analysis of the expression of AIM2, cGAS, LRRFIP1 and ZBP1. (B) BJAB cells were transfected with si-AIM2, si-cGAS, si-LRRFIP1 or si-ZBP1 for 48 h prior to transfection with poly(dA:dT) (2 μg/ml). After 6 hours, the expression of IFIT1, MX1, OAS1 and IFI44 were detected using qPCR. (C) BJAB cells were

transfected with si-AIM2, si-cGAS, si-LRRFIP1 or si-ZBP1 for 48 h prior to transfection with poly(dA:dT) (2 μg/ml). After 1 hour, the phosphorylation of JAK1 was detected using western blot. Data shown are the mean of 3 independent experiments; error bars represent s.e.m. *p<0.05, **p<0.01, ***p<0.001; ns denotes p>0.05.