Supporting Information

FIGURES

Figure S1: *Control of gene reporter expression on HEK293T transfected cell line*

mRNA from TLR3-, RIG-I- or MDA-5-transfected HEK293T cell lines was extracted and cDNA was synthesized by reverse transcriptase PCR. cDNA was then used in a real-time PCR assay to analyze the expression the gene of interest. Data are presented as arbitrary units and all values normalized to GAPDH transcript used as housekeeping gene. Data represent a pool of 3 independent PCR performed with mRNA from 3 different cell batches.

Figure S2: Within PBMC, mDC are the main producers of IFN-β in response to dsRNA activation

Whole PBMC or depleted of myeloid DC fraction (see "material and methods" section for details) were activated with poly(IC) or poly(AU) as detailed in figure 3A. IFN-β production was evaluated by ELISA. Data represent the mean of culture triplicates ± SD of a representative experiment of two performed with independent donors.

Figure S3: Supernatants from both pulsed-mDC or –MdDC trigger NK cell activation with comparable efficiency while they do not induced IFN-γ.

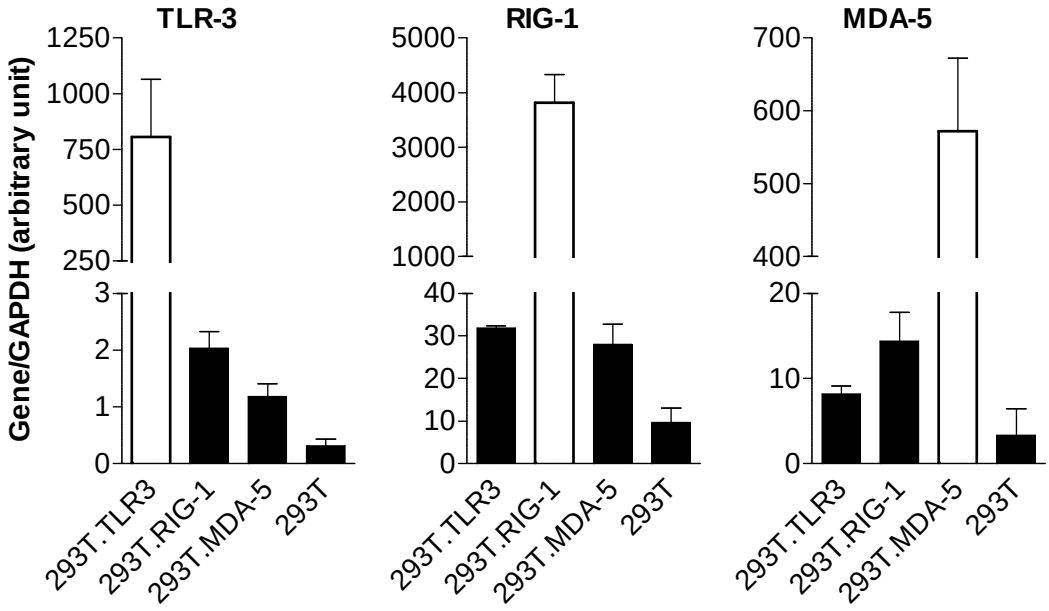
A. Supernatants from MACS-sorted mDC (BDCA1 and BDCA3) pulsed 4 hours (black histograms) or activated 20 hours (white histograms) with 30 µg/mL of either poly(I:C) or poly(A:U) were used to activate $1x10^6$/ml MACS-purified human NK cells. After 20h activation, mean fluorescence intensity of CD69 was measured on $CD56^+CD3^-$ NK cells by flow cytometry and IFN-γ produced in culture supernatant was quantified by ELISA as previously described (Fig.2). Data represent mean ± SD of 2 different donors activated with 2 batches of mDC SN. ***B.*** Supernatants from either $1x10^6$/ml *ex vivo* MACS-sorted mDC (striped histogram) or $1x10^6$/ml *in vitro* generated MdDC (grey histogram) pulsed 4 hours with

30 µg/mL of either poly(I:C) or poly(A:U) were used in a dose-range to activate $1x10^6$/ml MACS-purified NK cells. Data represent mean + SD of 2 different donors activated with 2 batches of mDC or MdDC SN.

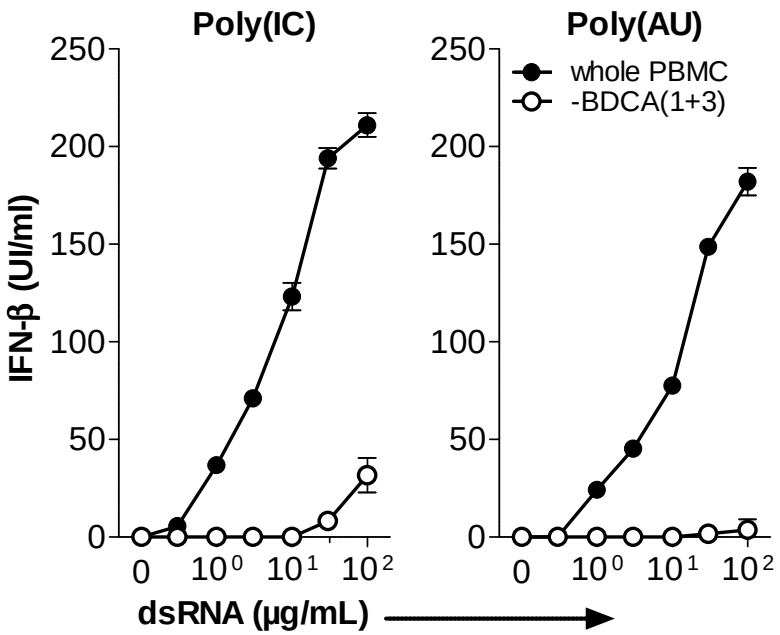
Figure S4: ***5'-triphosphate single stranded RNA (3pRNA) activates RIG-I but not TLR3 nor MDA5.***

$4x10^5$/ml dsRNA-receptors expressing cell lines were stimulated with Lipofectamin 2000® associated 3pRNA. Luciferase activity was measured as described in Supplemental Figure 1A and results are expressed as the ratio between stimulated and non-stimulated cells. Data are from one representative experiment out of 3 (mean + SD of culture triplicates).

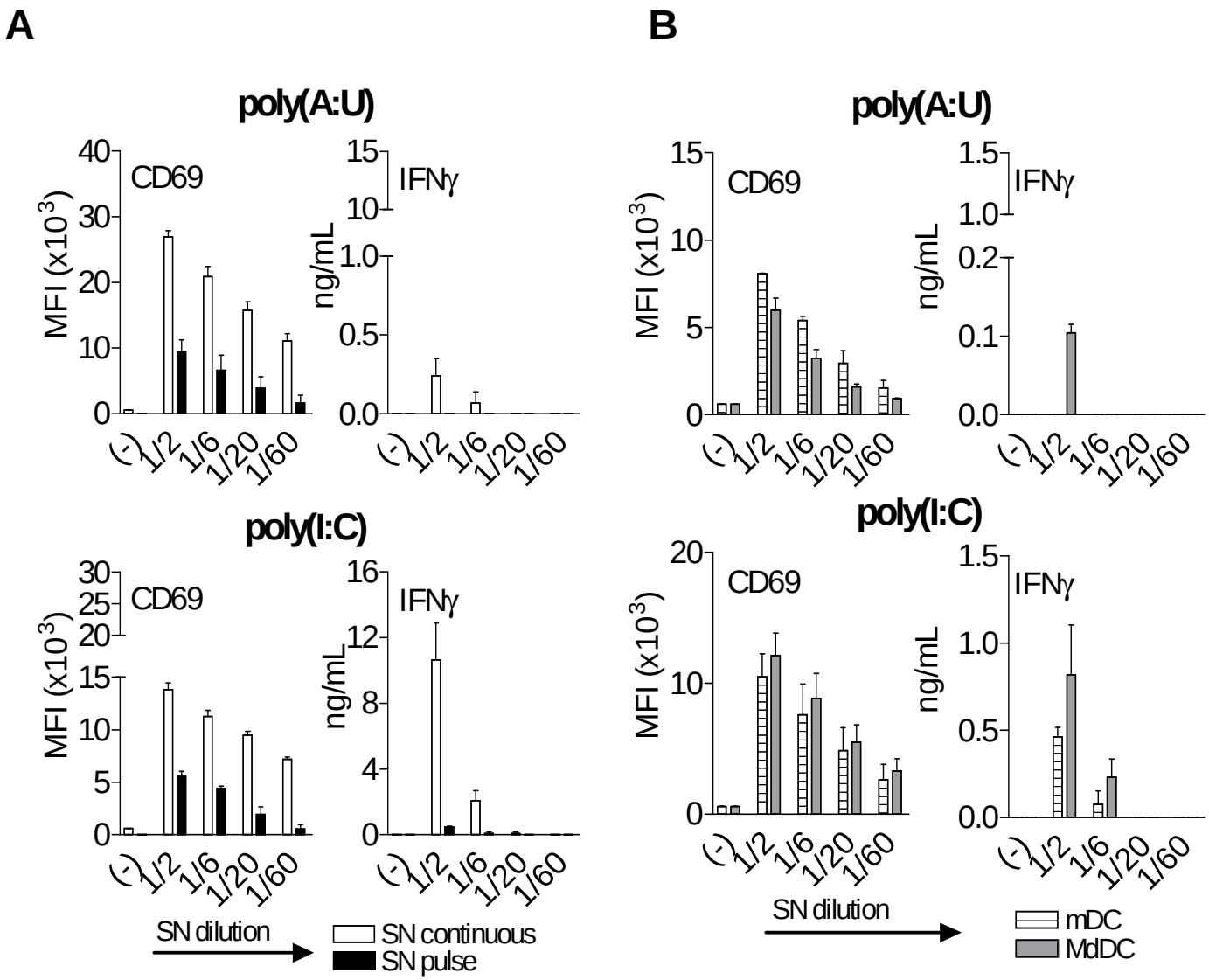
Supplemental FIGURE 1



Supplemental FIGURE 2



Supplemental FIGURE 3



Supplemental FIGURE 4