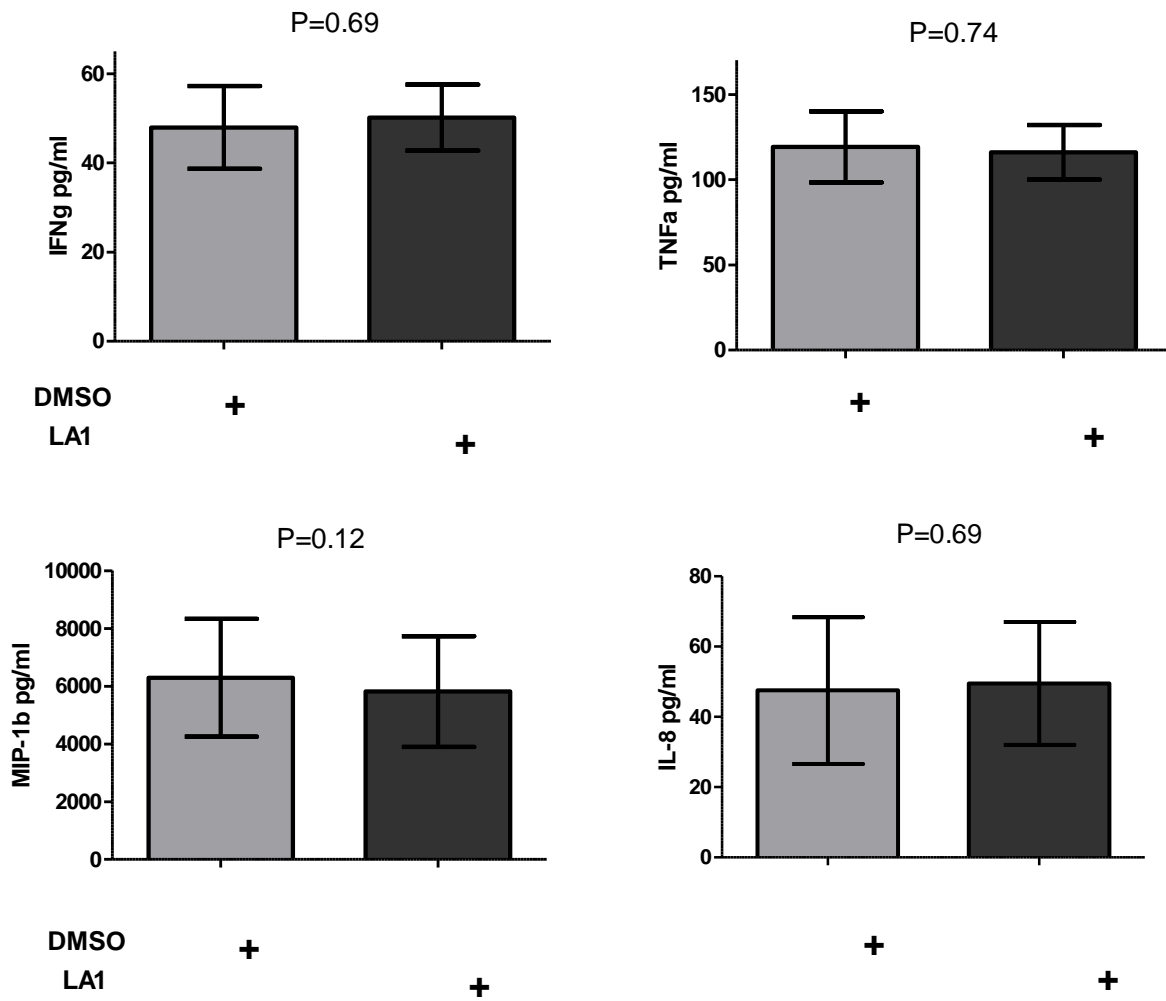


## SUPPLEMENTARY MATERIAL

**Supplementary Figure 1:** The effect of Leukadherin-1 on inflammatory cytokine secretion by Fc-receptor engaged NK cells.



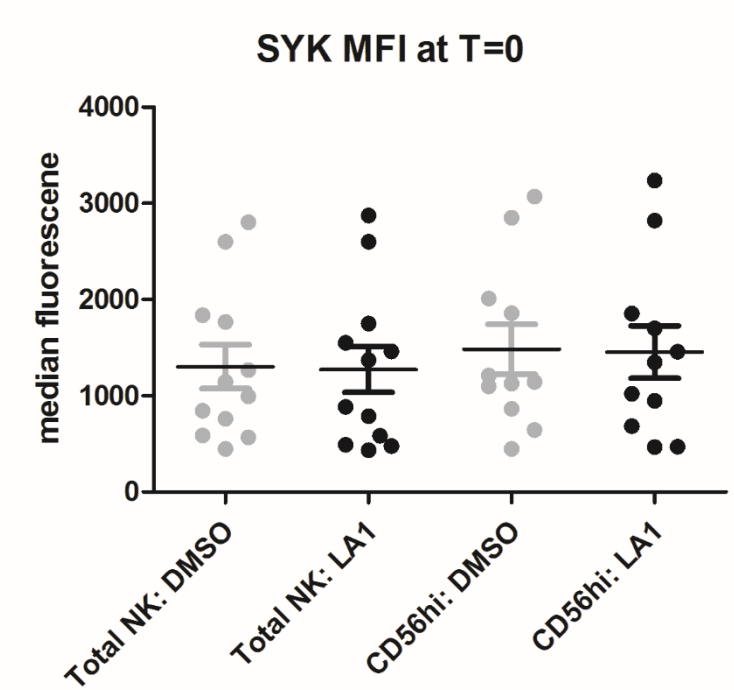
Cells were pretreated with Leukadherin-1 (LA1) and stimulated using IgG coated polystyrene particles (N=12). DMSO provides the vector control for Leukadherin-1. Data presented are mean  $\pm$  standard error of the supernatant cytokine concentration at 24 hours. Statistical testing by 2-tailed paired t-test.

**Supplementary Table 1:** The effect of Syk blockade on cytokine secretion by stimulated, Leukadherin-1 treated NK cells.

Secreted Cytokine	LA1 + IL-12 + IL-15 stimulated (N=6)		LA1 + IL-12 + IL-18 stimulated (N=5)	
	Mean Change with syk inhibitor (pg/ml)	p-value	Mean Change with syk inhibitor (pg/ml)	p-value
IFN- $\gamma$	-1170 (400)	0.043	-264 (2594)	0.92
TNF	-43 (17)	0.052	-59 (18)	0.0046
MIP-1 $\beta$	-6810 (1050)	0.0029	-1884 (474)	0.029
IL-8	-106 (57)	0.12	-21 (6.7)	0.033

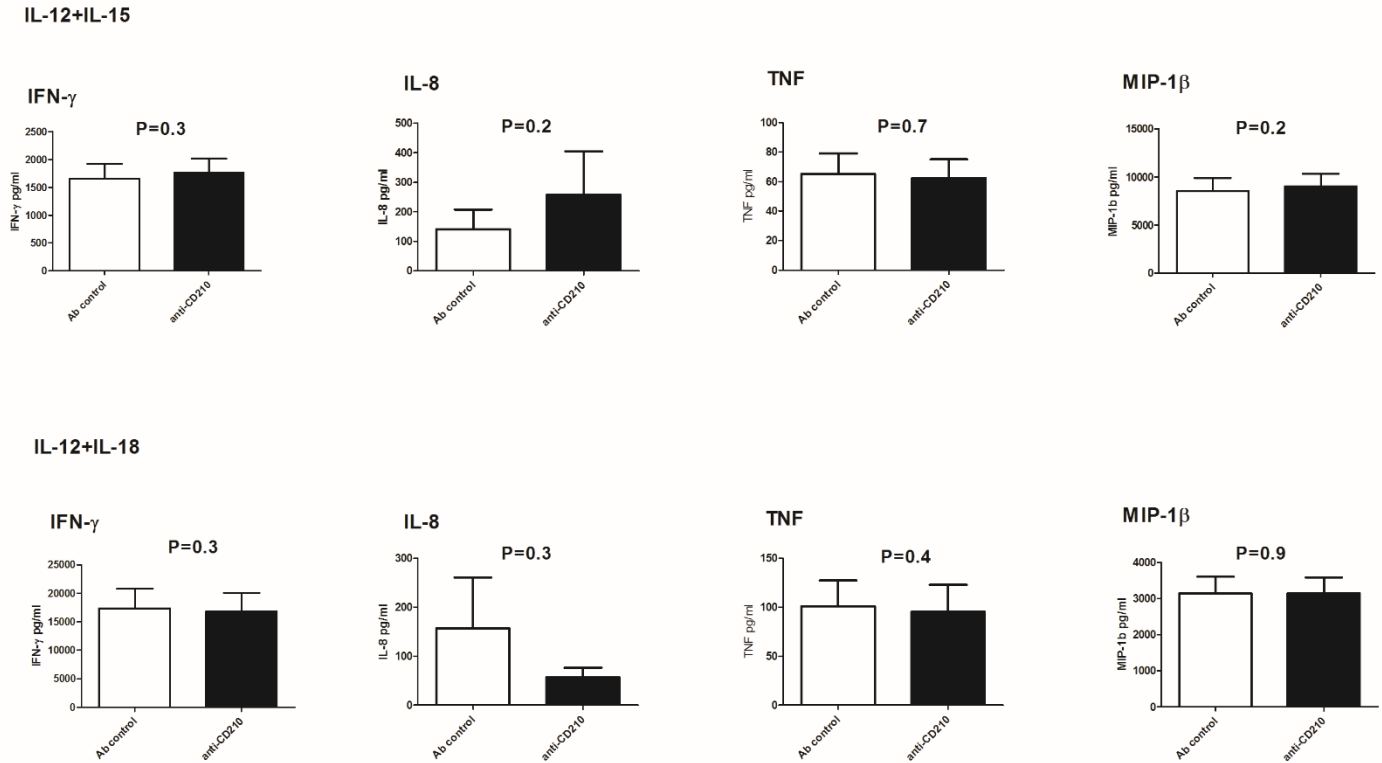
The mean (standard error) change in cytokine secretion consequent upon anti-Syk treatment, when compared with the reduced cytokine secretion already observed (figure 1) following treatment with Leukadherin-1 (LA1). Leukadherin-1 + IL-12 + IL-15 stimulation (left) or Leukadherin-1 + IL-12 + IL-18 stimulation (right). Statistics by 2-tailed paired t test.

**Supplementary Figure 2: The effect of Leukadherin-1 on Syk phosphorylation**



Cells were incubated with either Leukadherin-1 (LA1) or DMSO for 30 minutes (N=12). DMSO provides the vector control for Leukadherin-1. Cells were permeabilised and stained with Alexa647 anti-pSyk. Data presented are mean +/- standard error of the median fluorescence of pSyk. Statistical testing by 2-tailed paired t-test.

**Supplementary Figure 3:** The effect of IL-10 receptor blocking antibodies on IL-12+IL-15- and IL-12+IL-18-stimulated NK cell cytokine secretion



NK cells were incubated with anti-CD210 antibody or isotype control together with IL-12+IL-15 (top panel) or IL12-IL-18 (bottom panel). Data presented are mean +/- standard error of the supernatant cytokine concentration at 24 hours. Statistical testing by 2-tailed paired t-test.

**Supplementary Figure 4:** The effect of Leukadherin-1 on in p38, ERK, STAT3 phosphorylation

A) Heat map (log<sub>2</sub> median fold-change) of effects of Leukadherin-1 pre-treatment on pSTAT43, p-p38, pERK and pSTAT5 following NK cell stimulation with IL-12+IL-18 (top panel) and IL-12+IL-15 (lower panel) in total NK cells (left panel) and CD56hi (right panel) across multiple time points. Three to nine samples per time point.

