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Appendixes



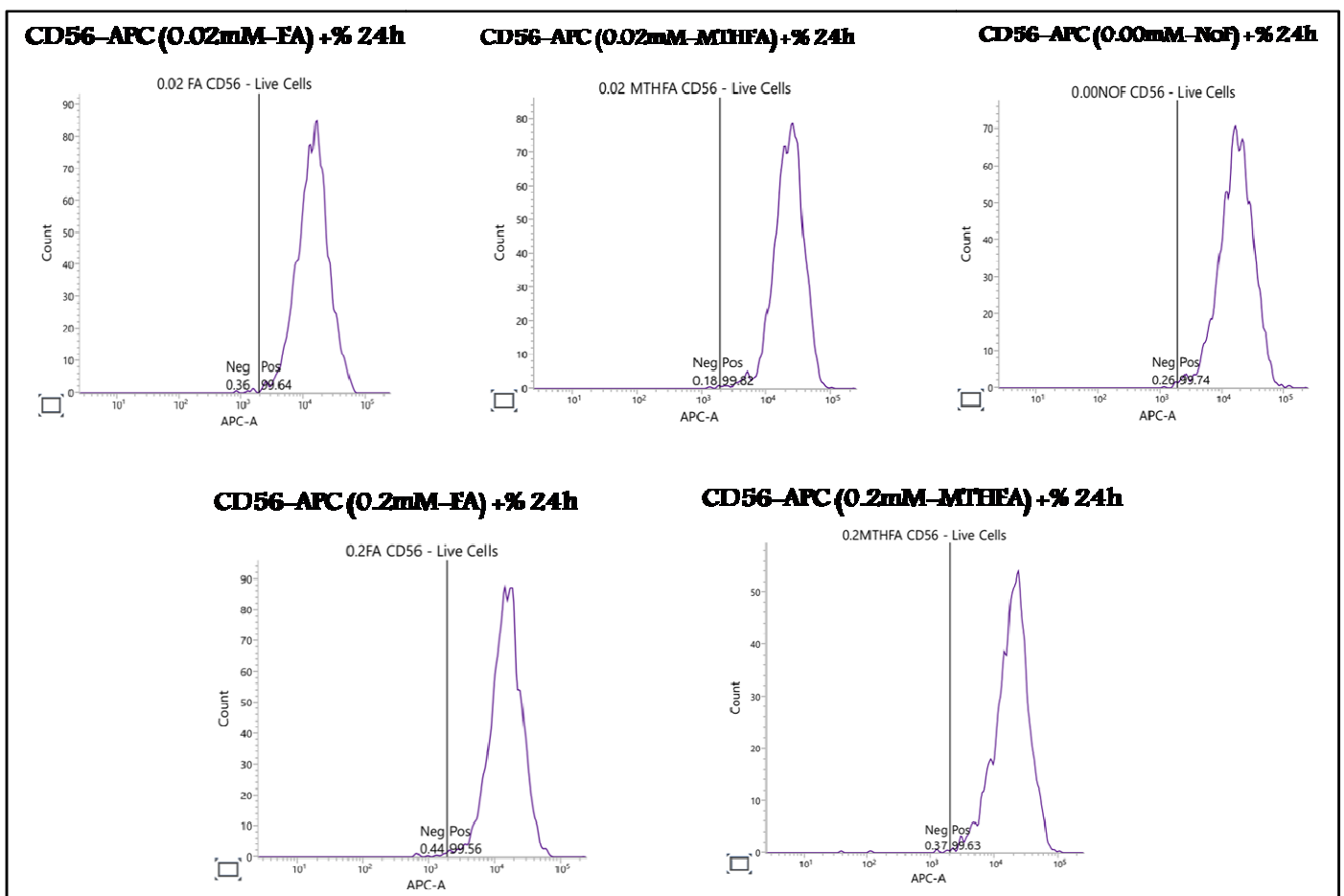
*** Appendix I ***

Chapter IV:

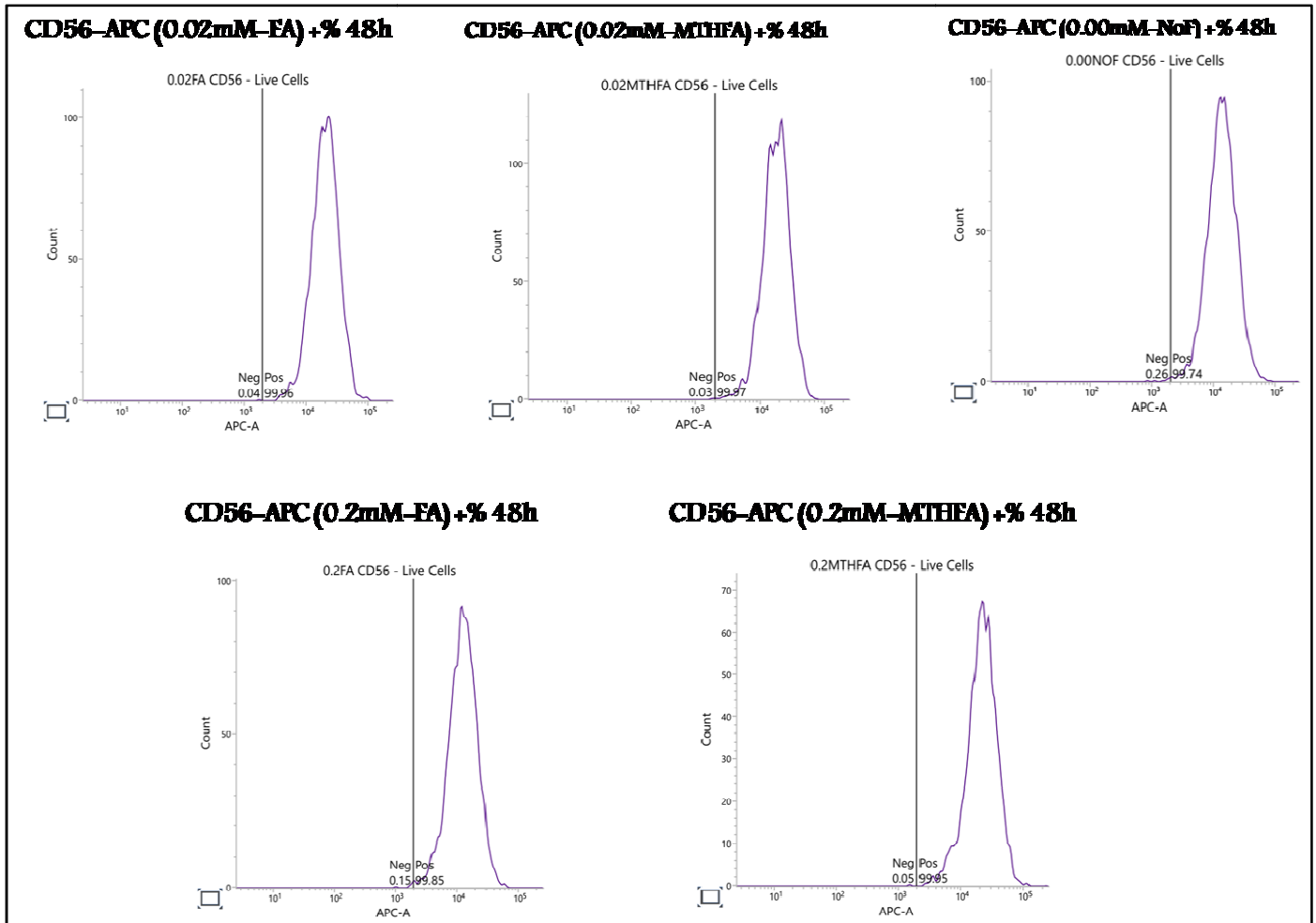
1- Flow cytometry plots show the percentage % of positive NK 92 cell population for CD56, IFN γ and HIF1 α in mono-culture settings after 24hrs, 48hrs and 72hrs in different folate treatments (0.02mM of FA as control, 0.02mM of 5-MTHFA, 0.2mM of either FA or 5-MTHFA and no exogenous folate added; NoF):

1.1. CD56+% :

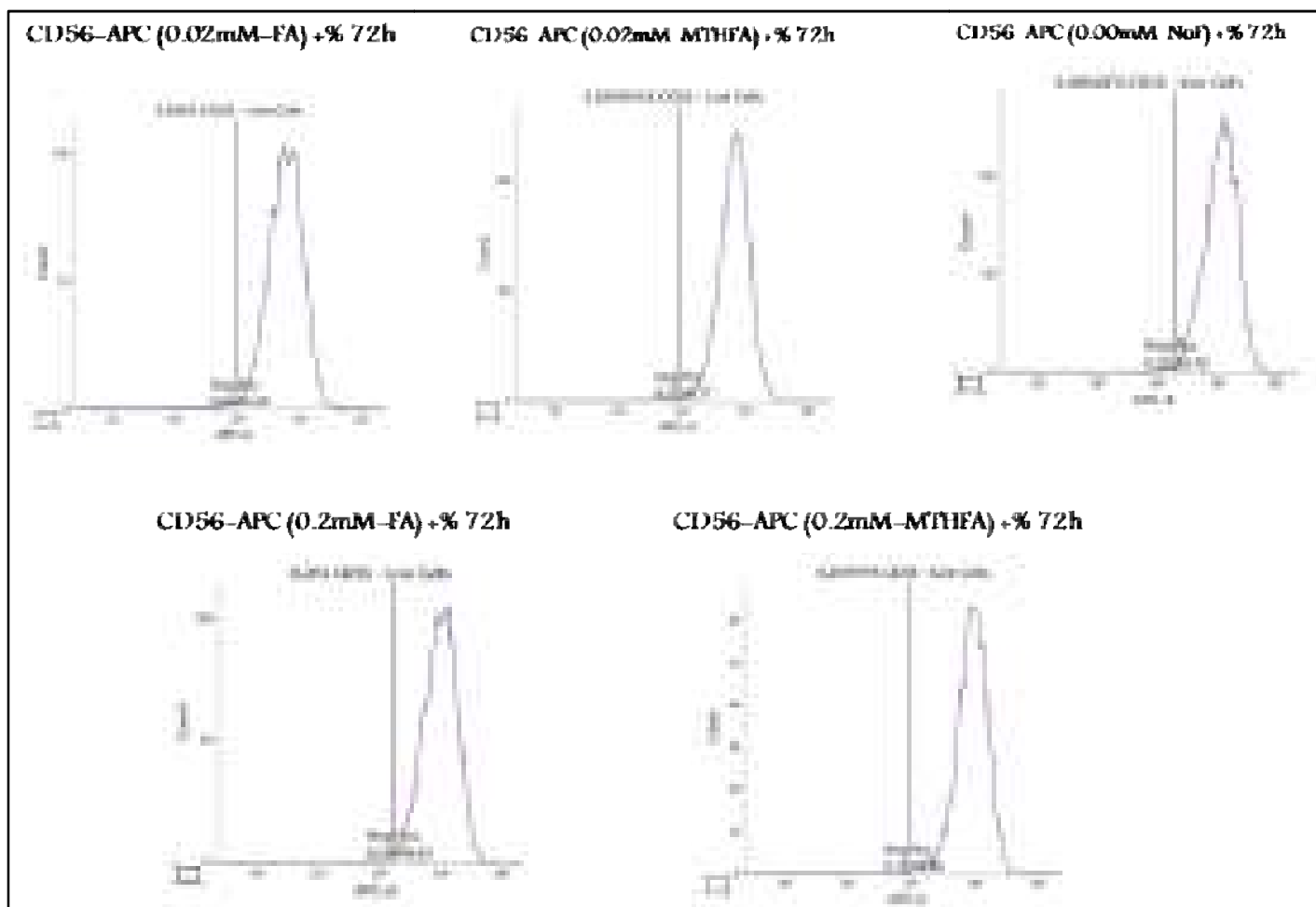
1.1.1. After 24hrs:



1.1.2. After 48hrs:

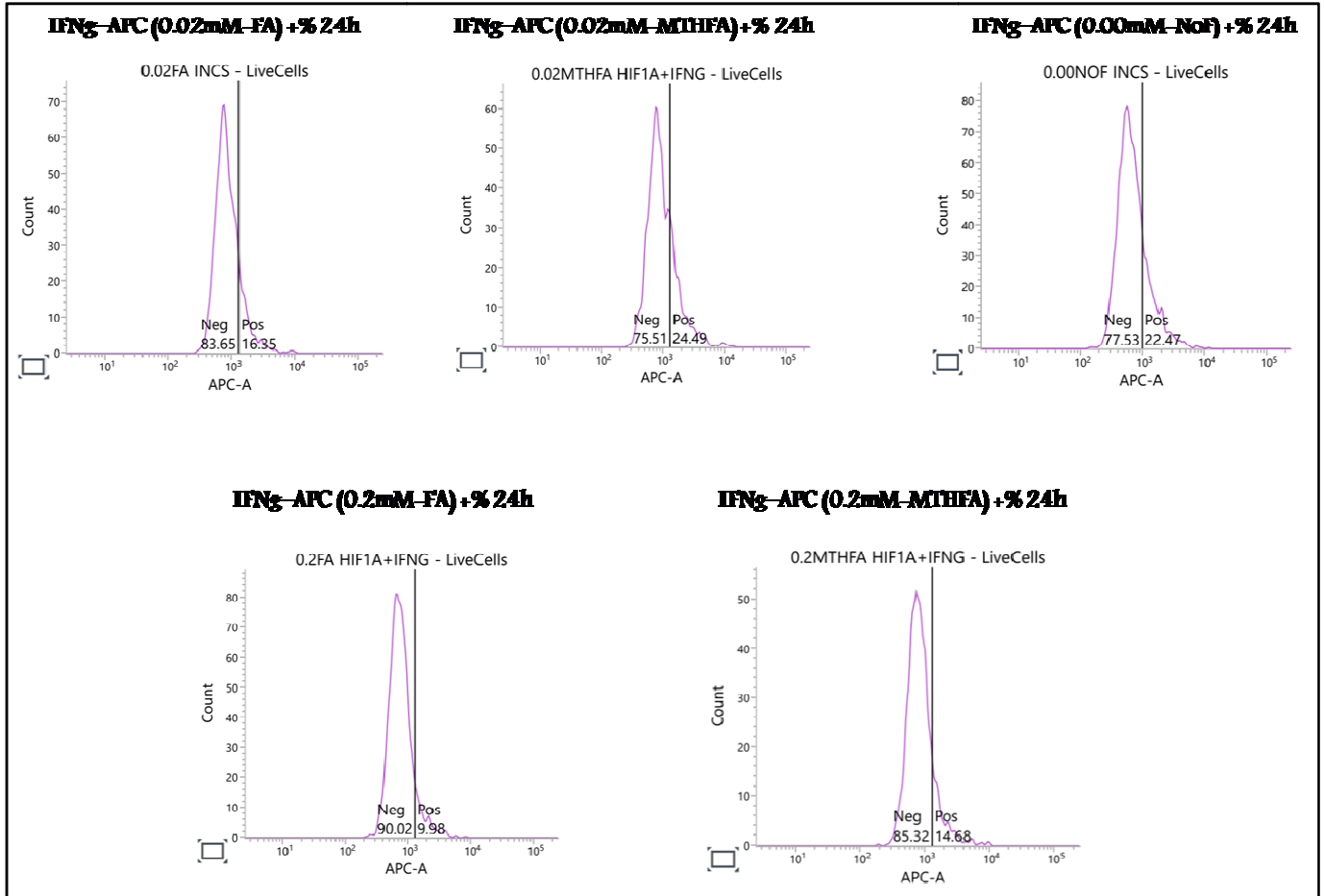


1.1.3. After 72hrs:

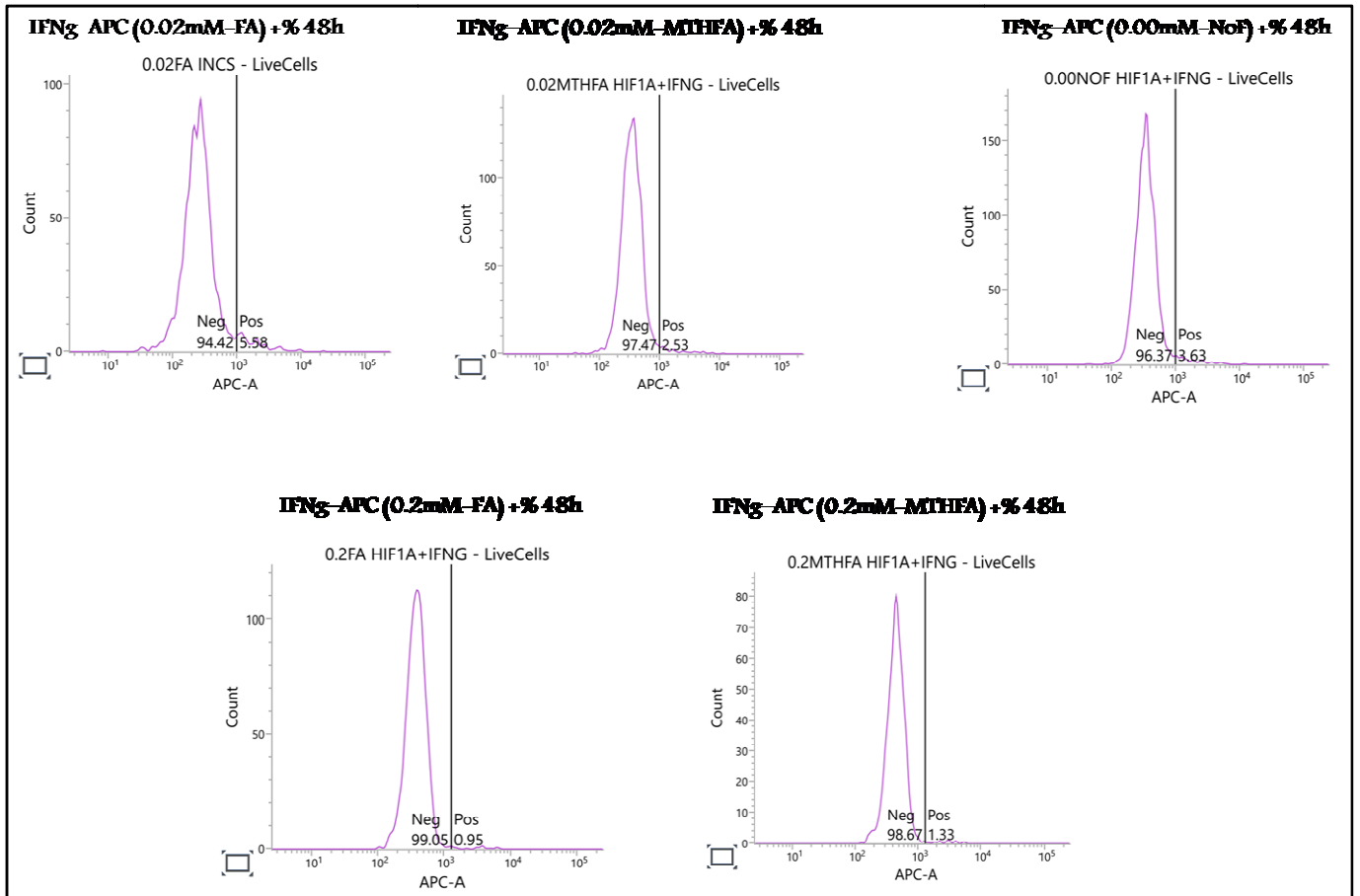


1.2. $IFN\gamma$ +% :

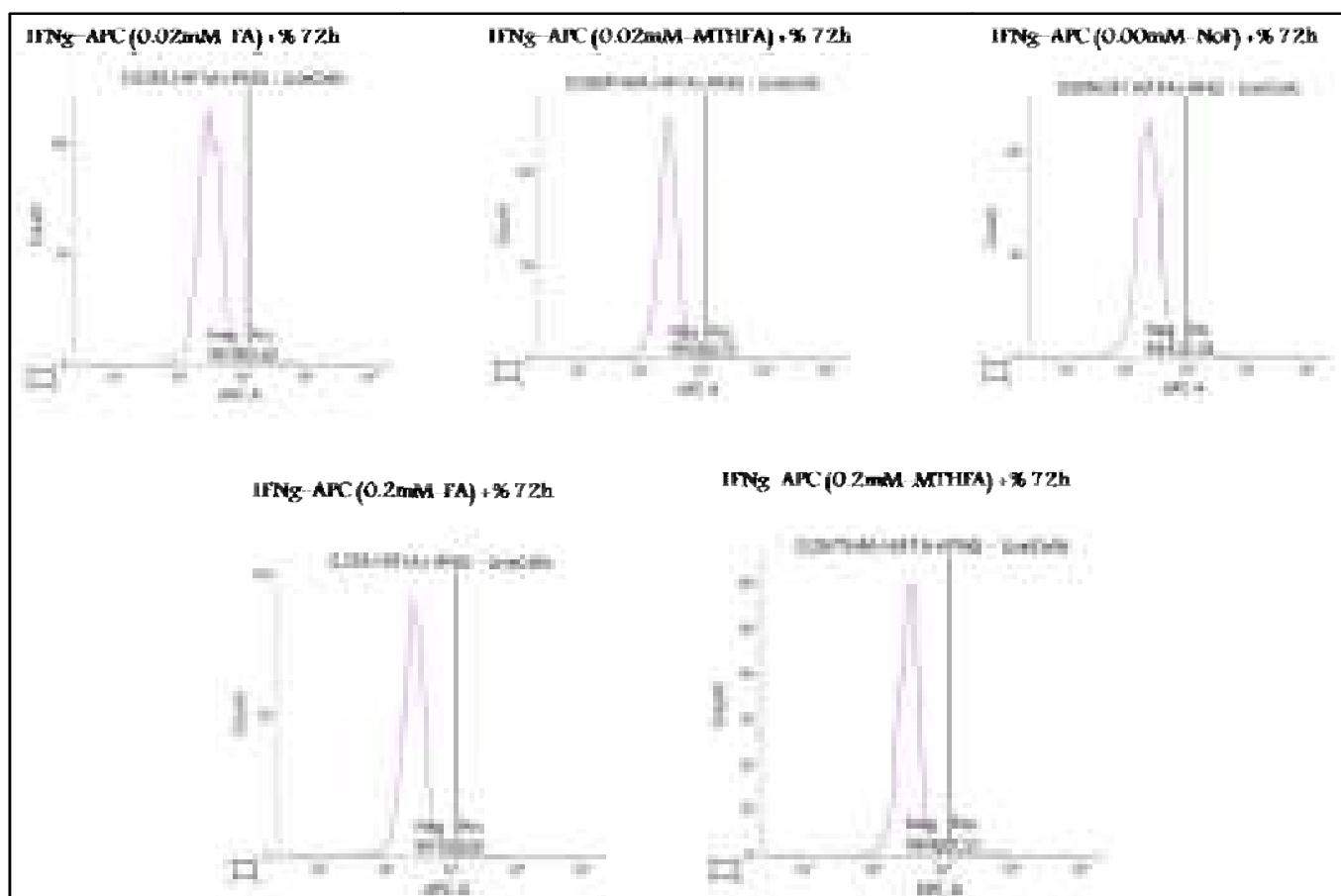
1.2.1. After 24hrs:



1.2.2. After 48hrs:

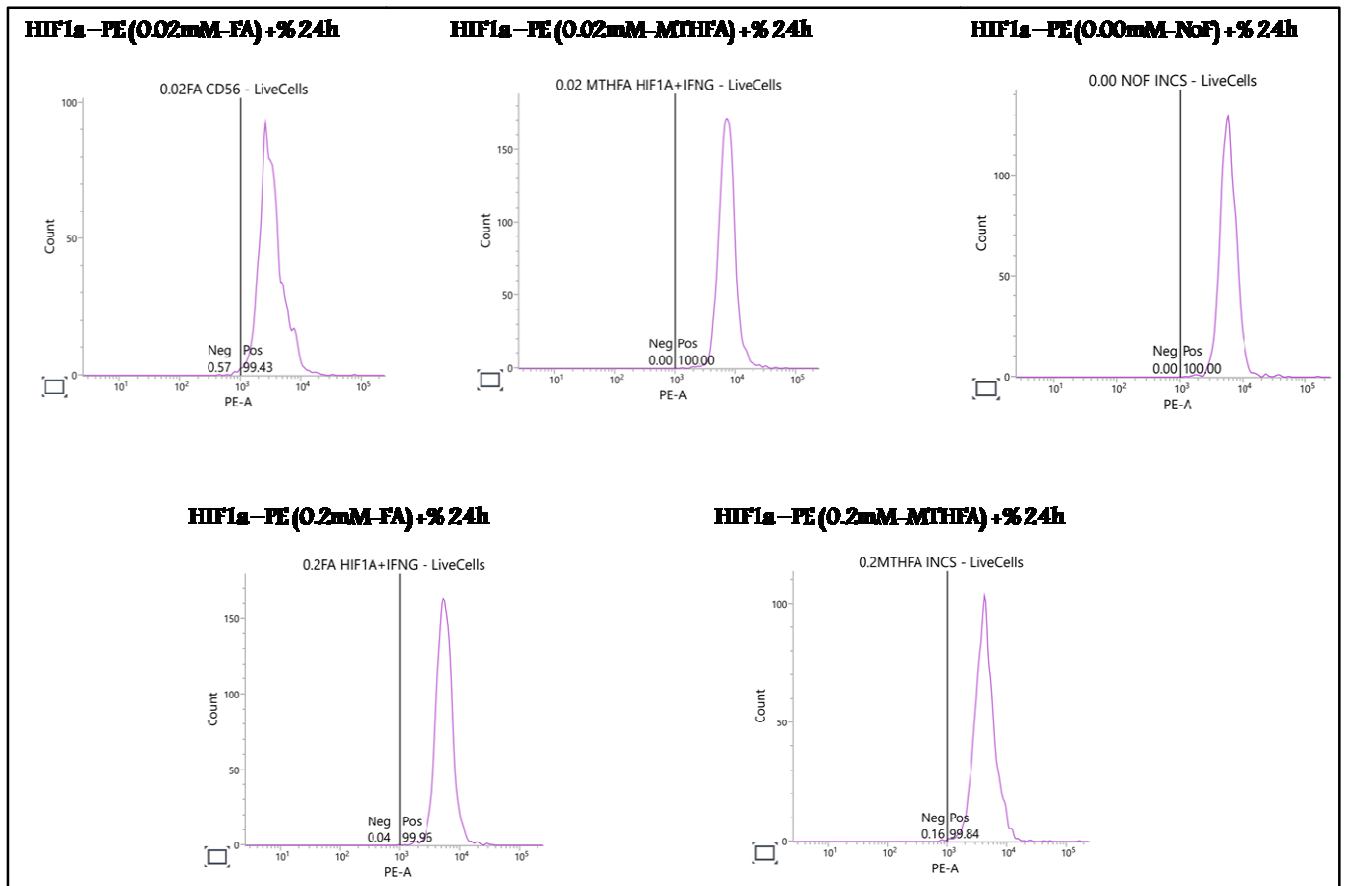


1.2.3. After 72hrs:

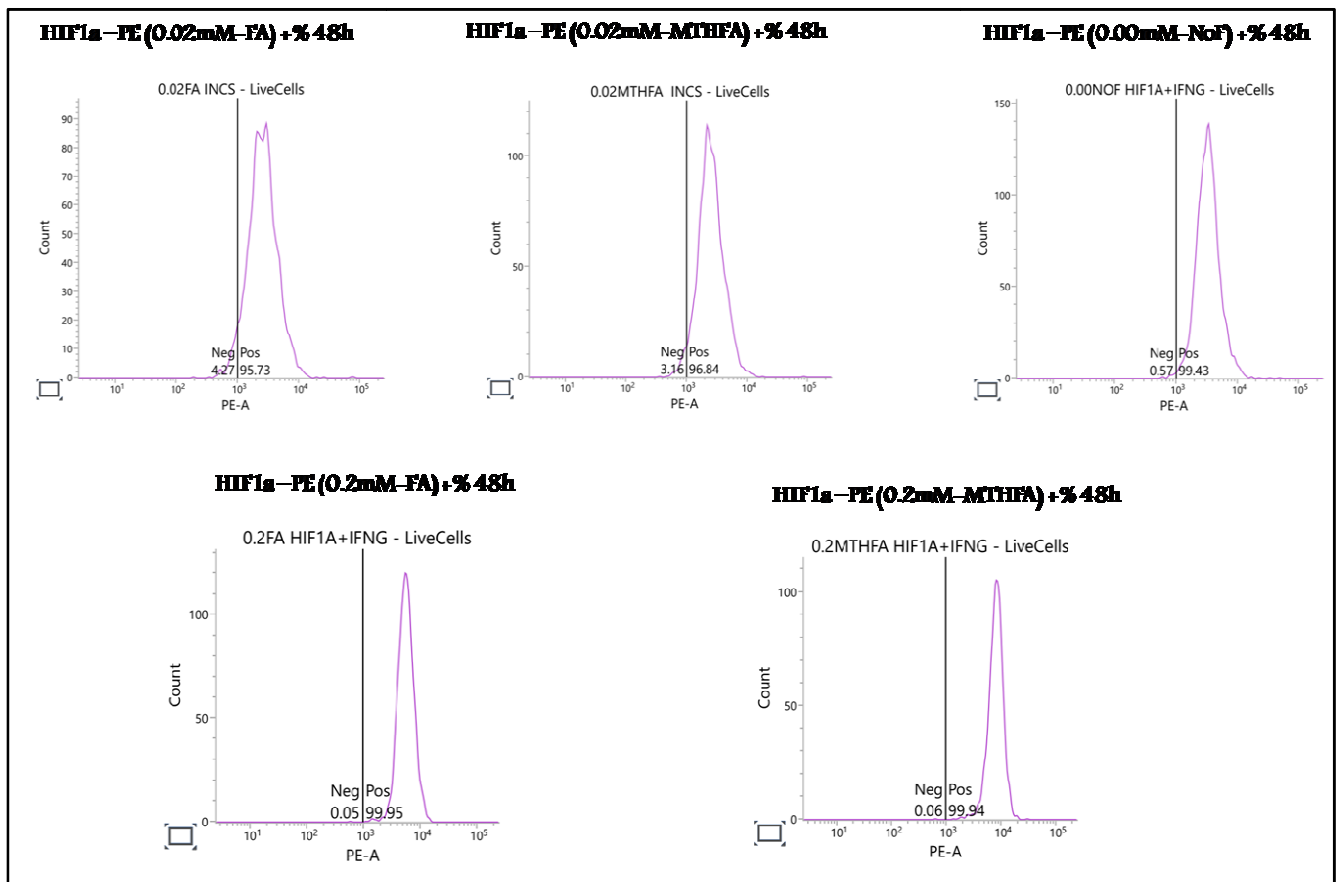


1.3. **HIF1 α +%**:

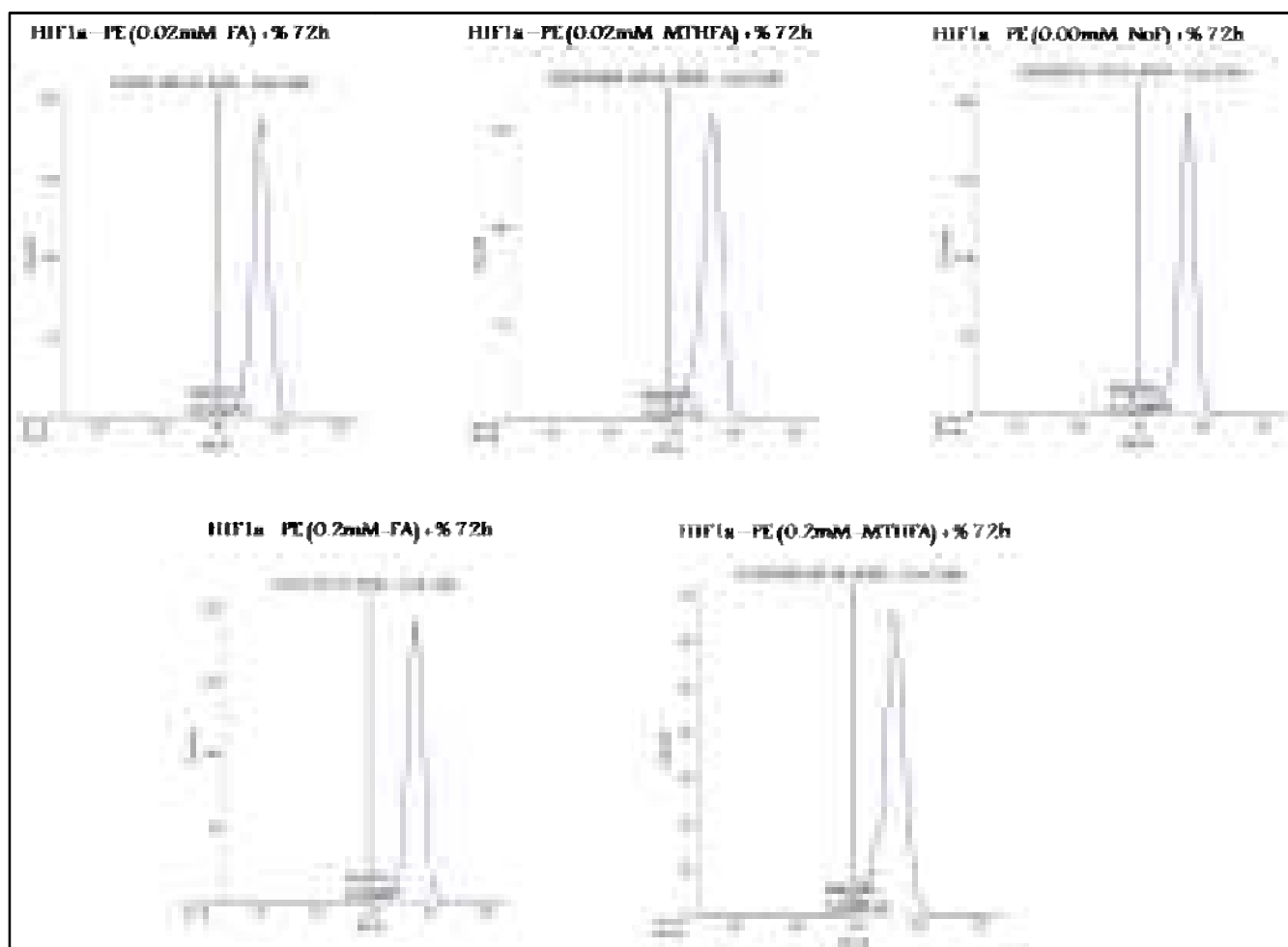
1.3.1. After 24hrs:



1.3.2. After 48hrs:



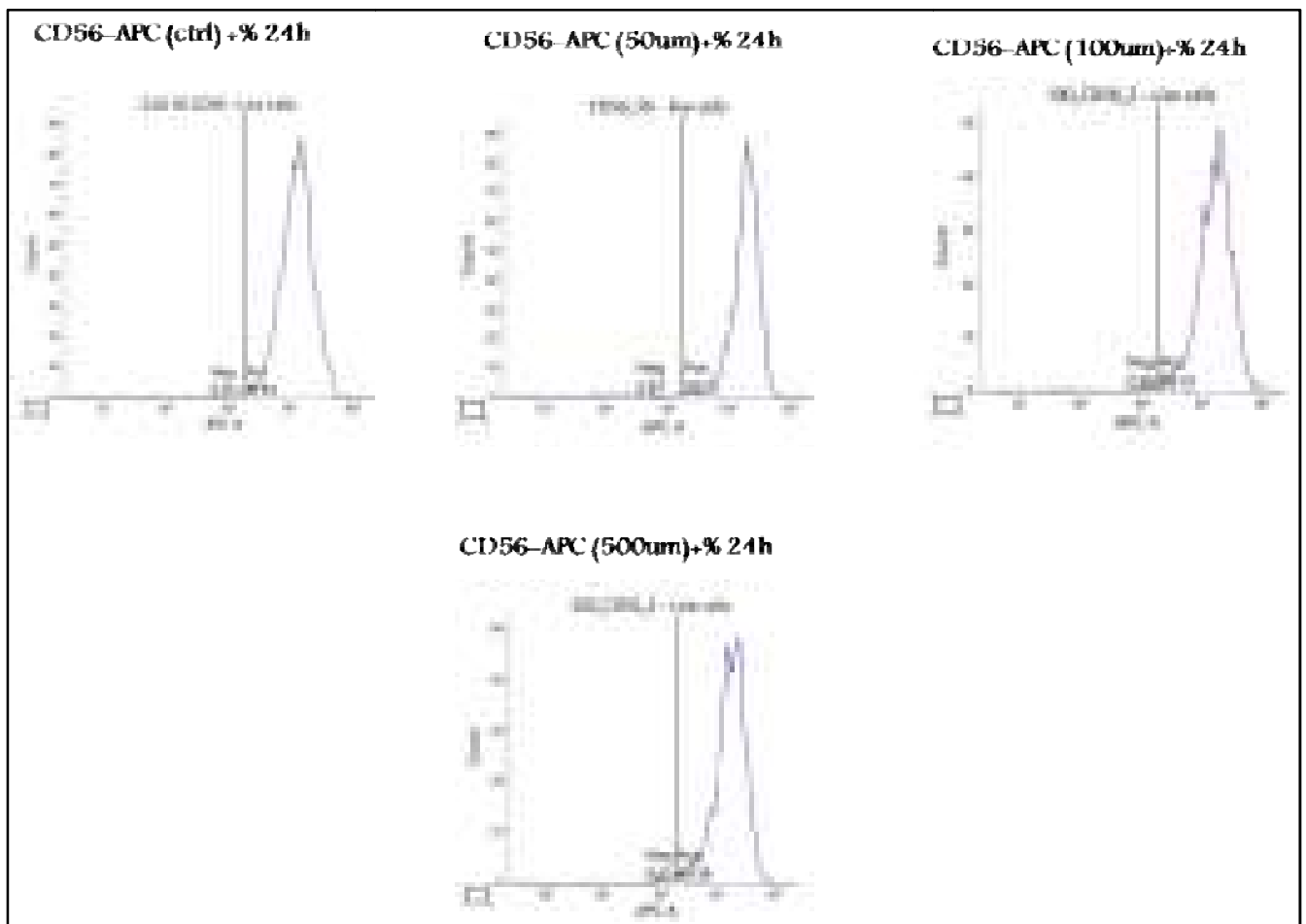
1.3.3. After 72hrs:



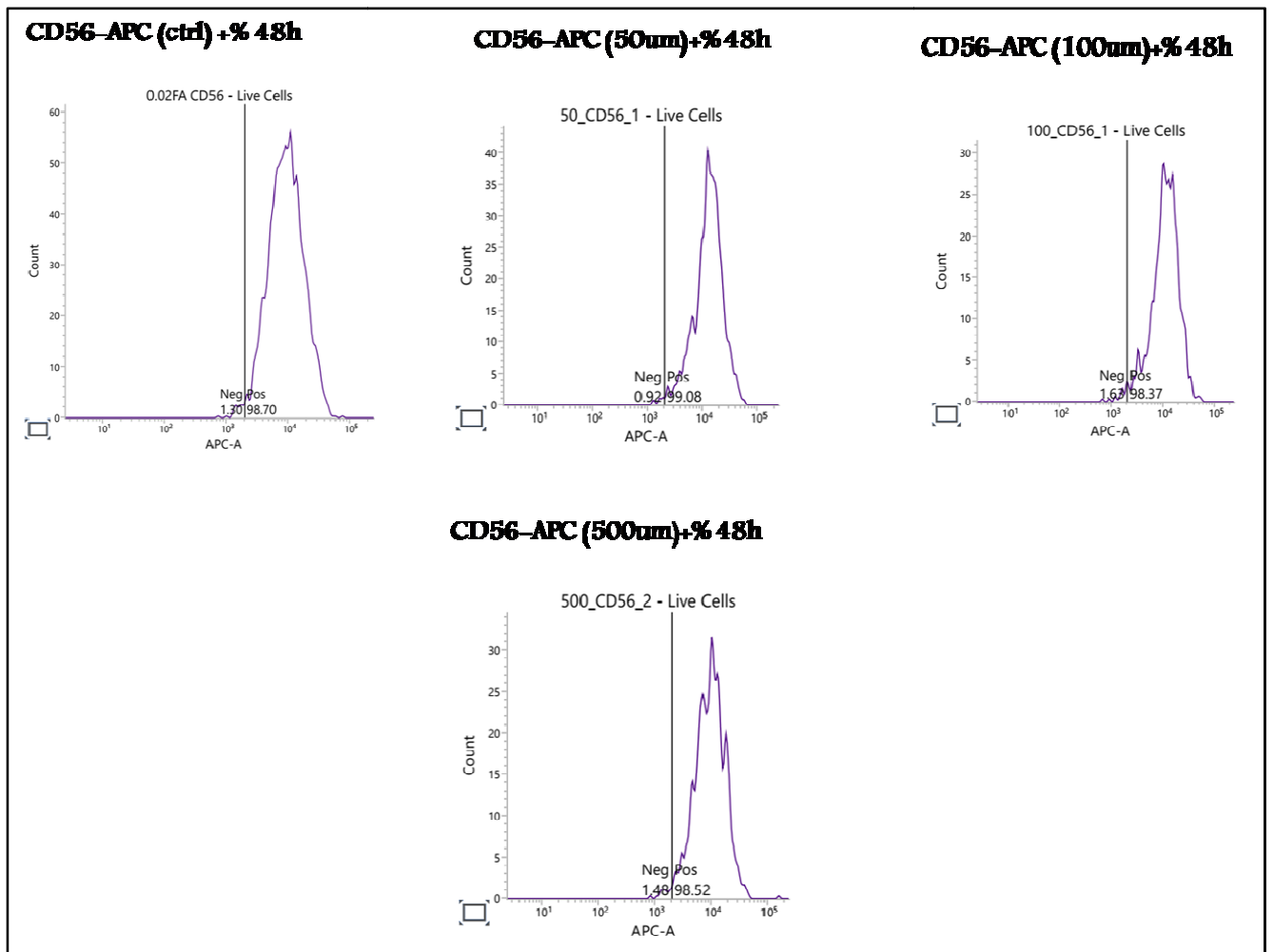
2. Flow cytometry plots show the percentage % of positive NK 92 cell population for CD56, IFN γ and HIF1 α in mono-culture settings after 24hrs, 48hrs and 72hrs treated with different succinate concentrations (50 μ M, 100 μ M, 500 μ M):

2.1. CD56+%:

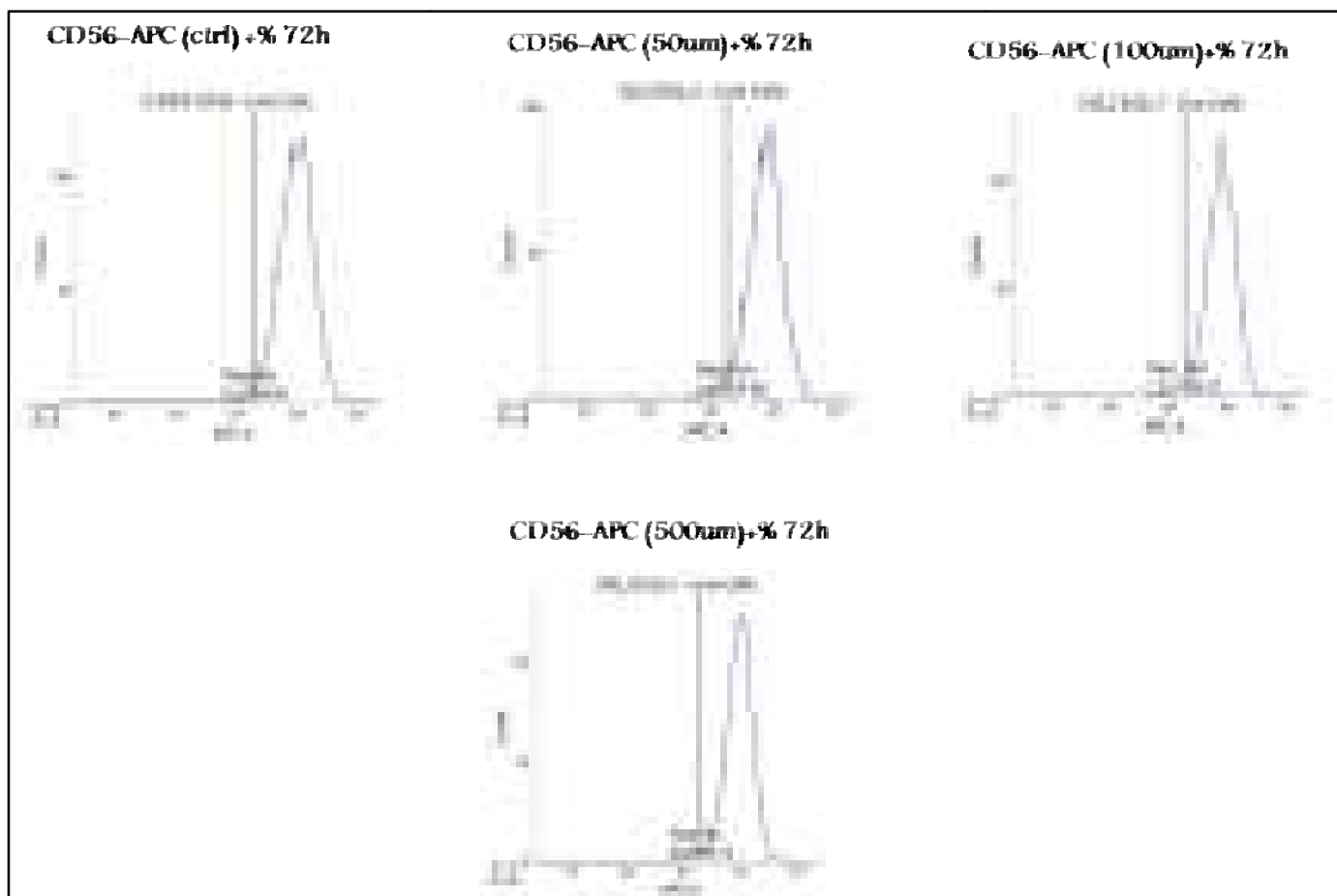
2.1.1. After 24hrs:



2.1.2. After 48hrs:

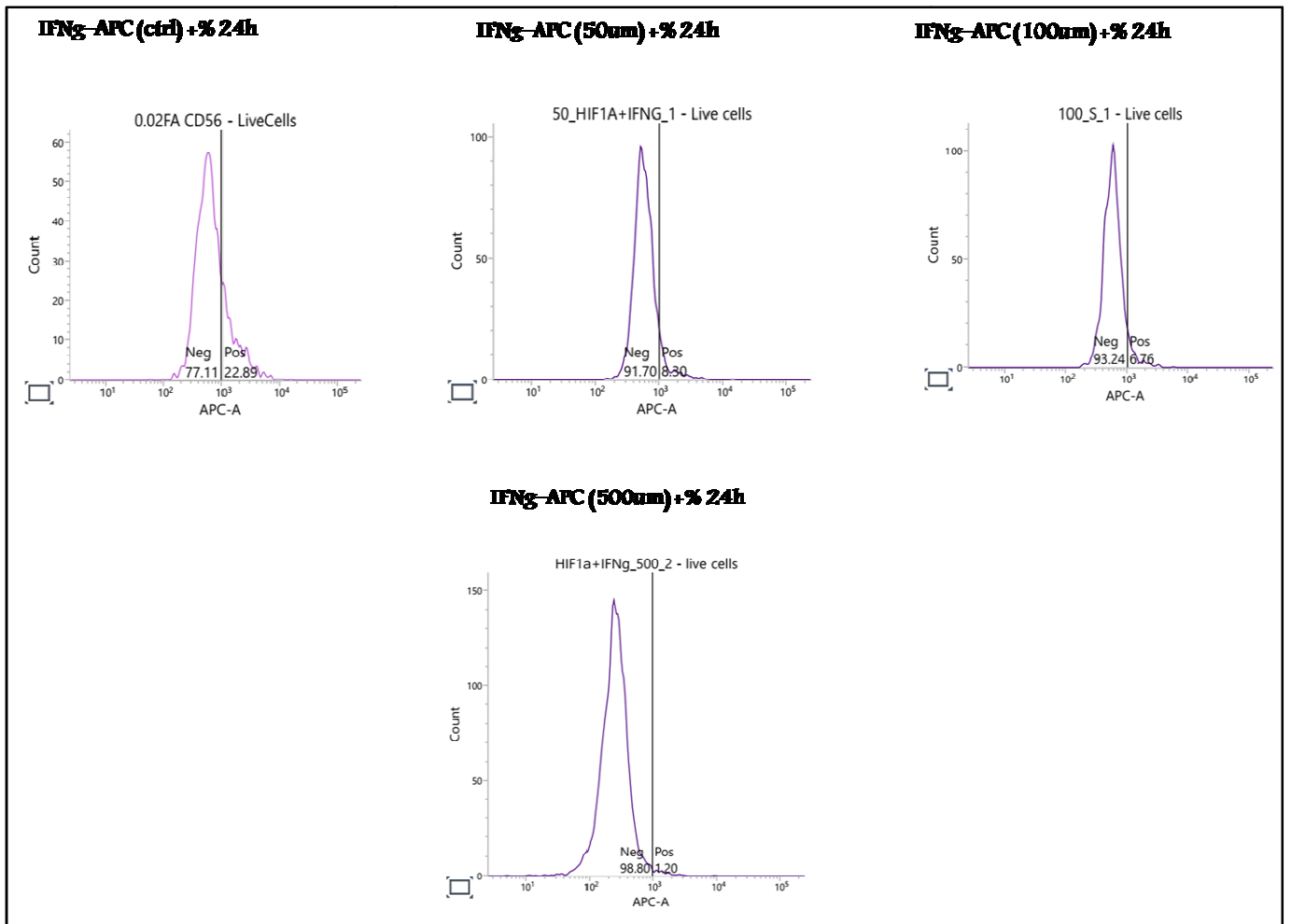


2.1.3. After 72hrs:

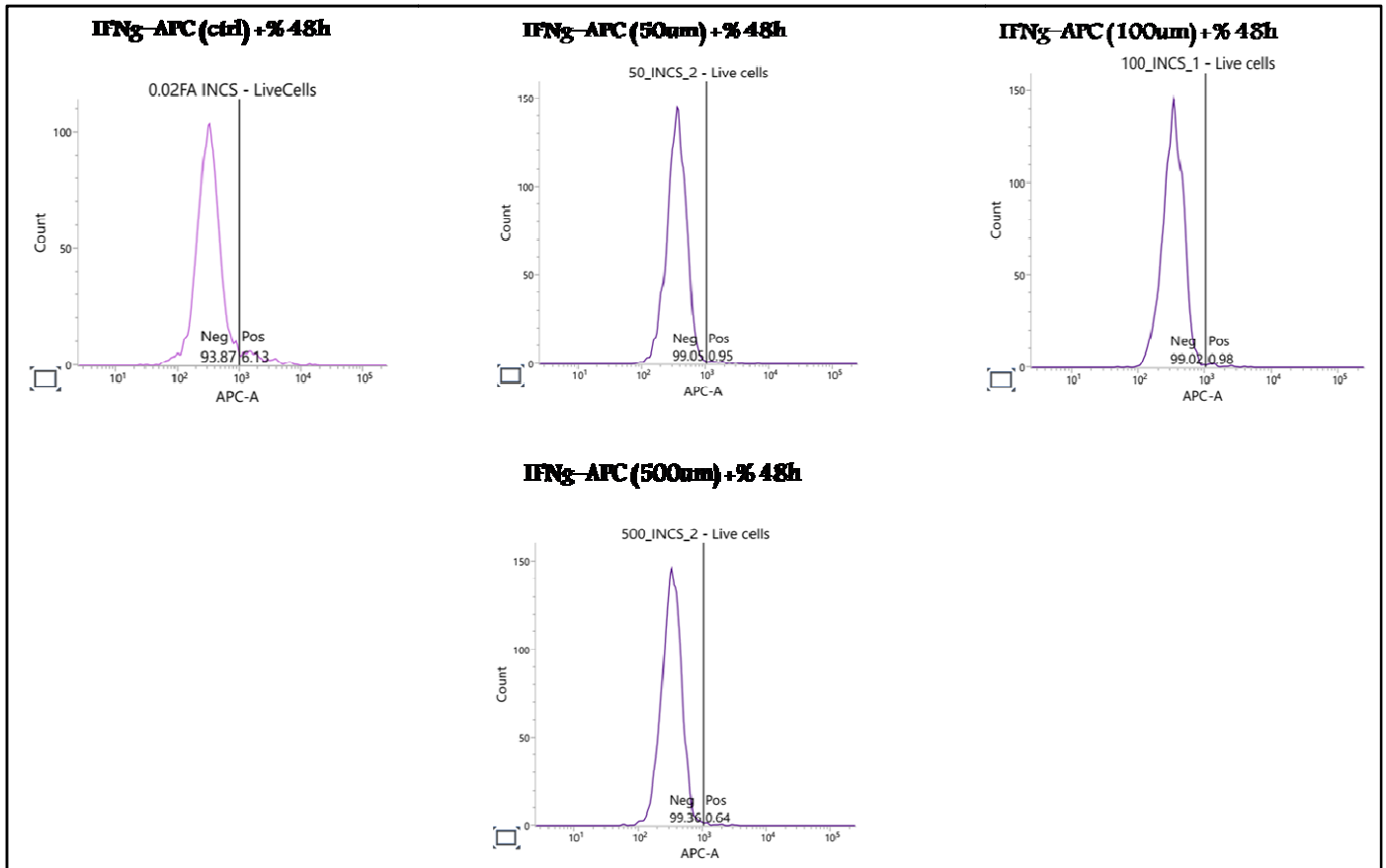


2.2. IFN γ +%:

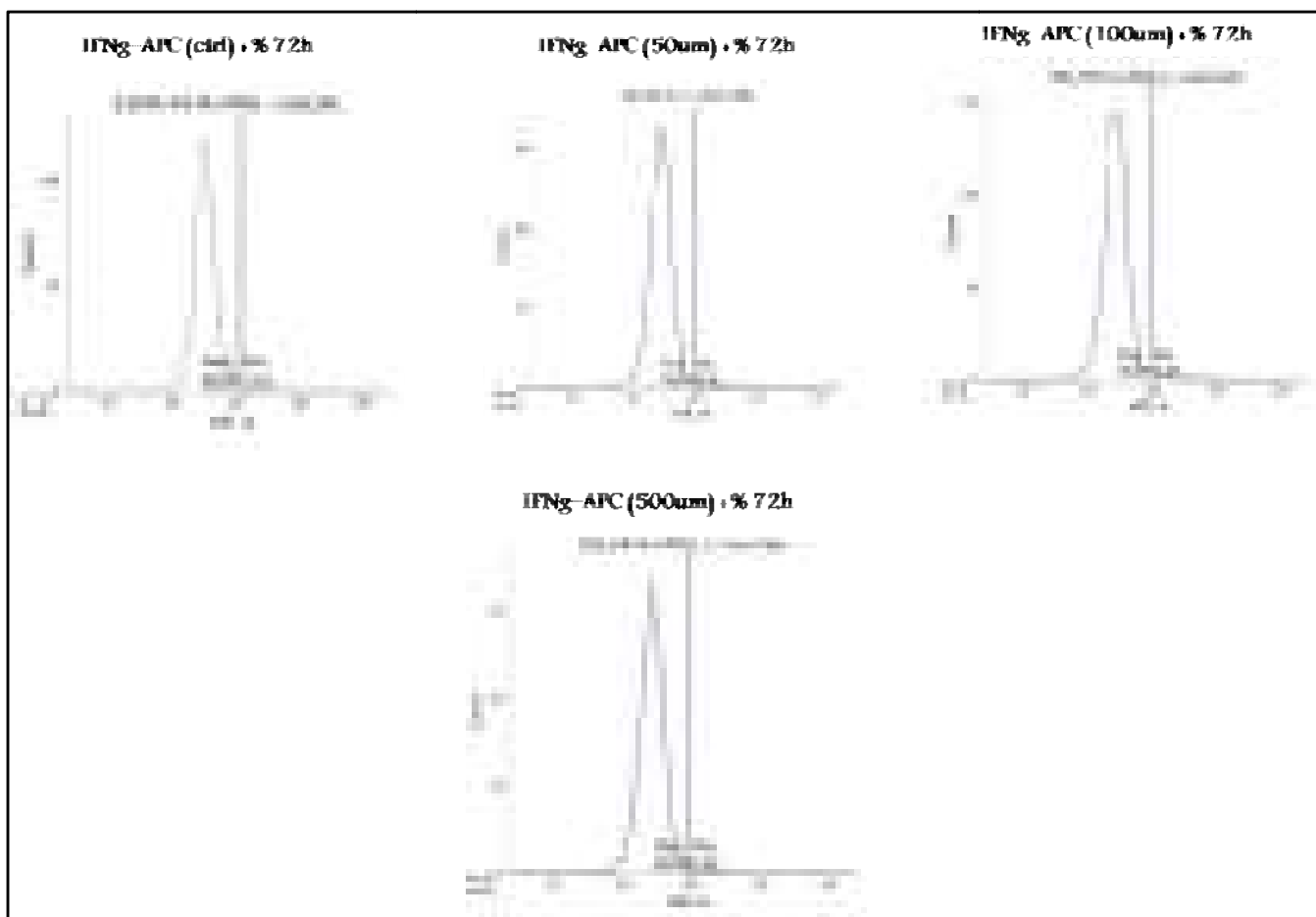
2.2.1. After 24hrs:



2.2.2. After 48hrs :

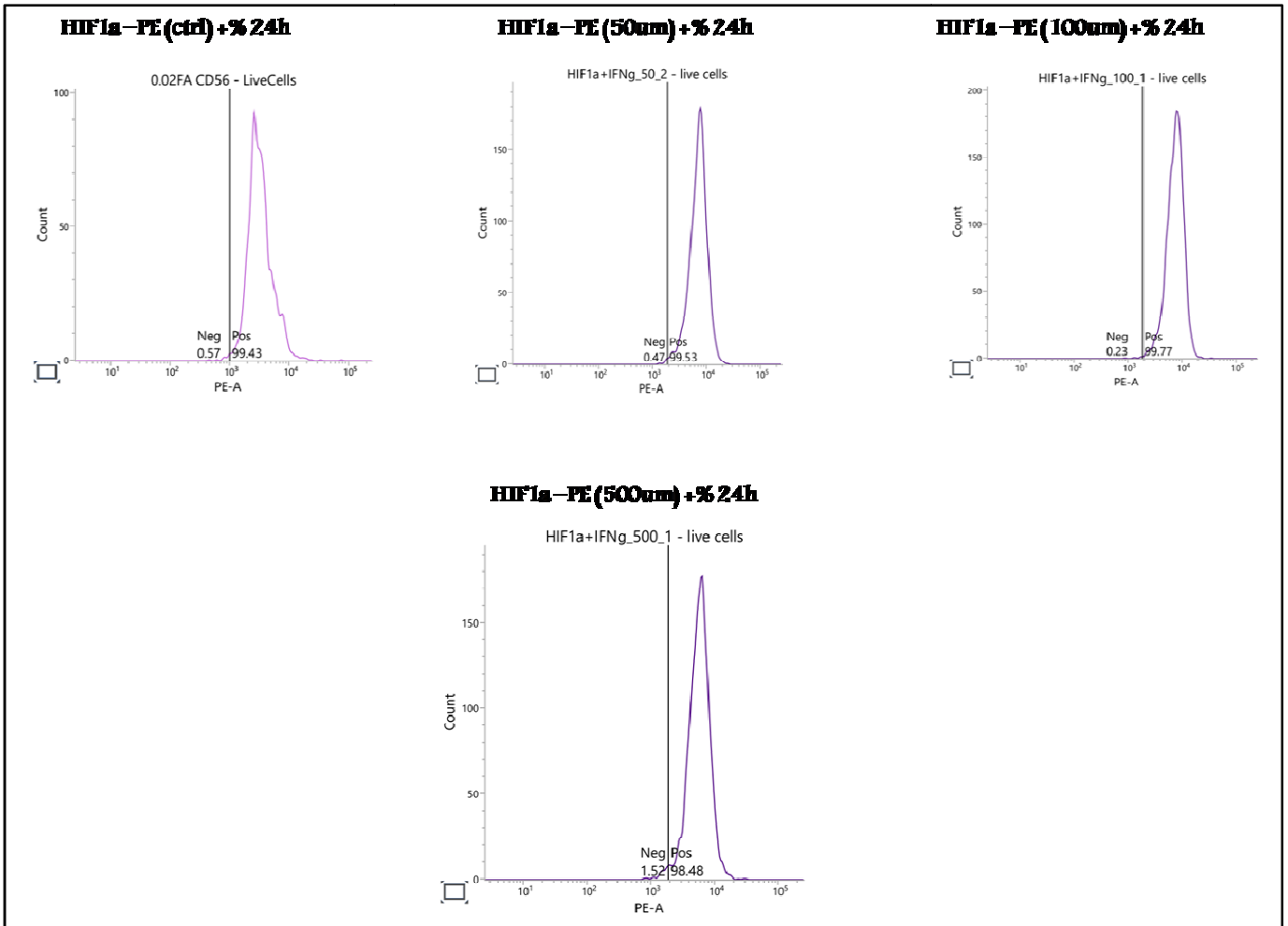


2.2.3. After 72hrs:

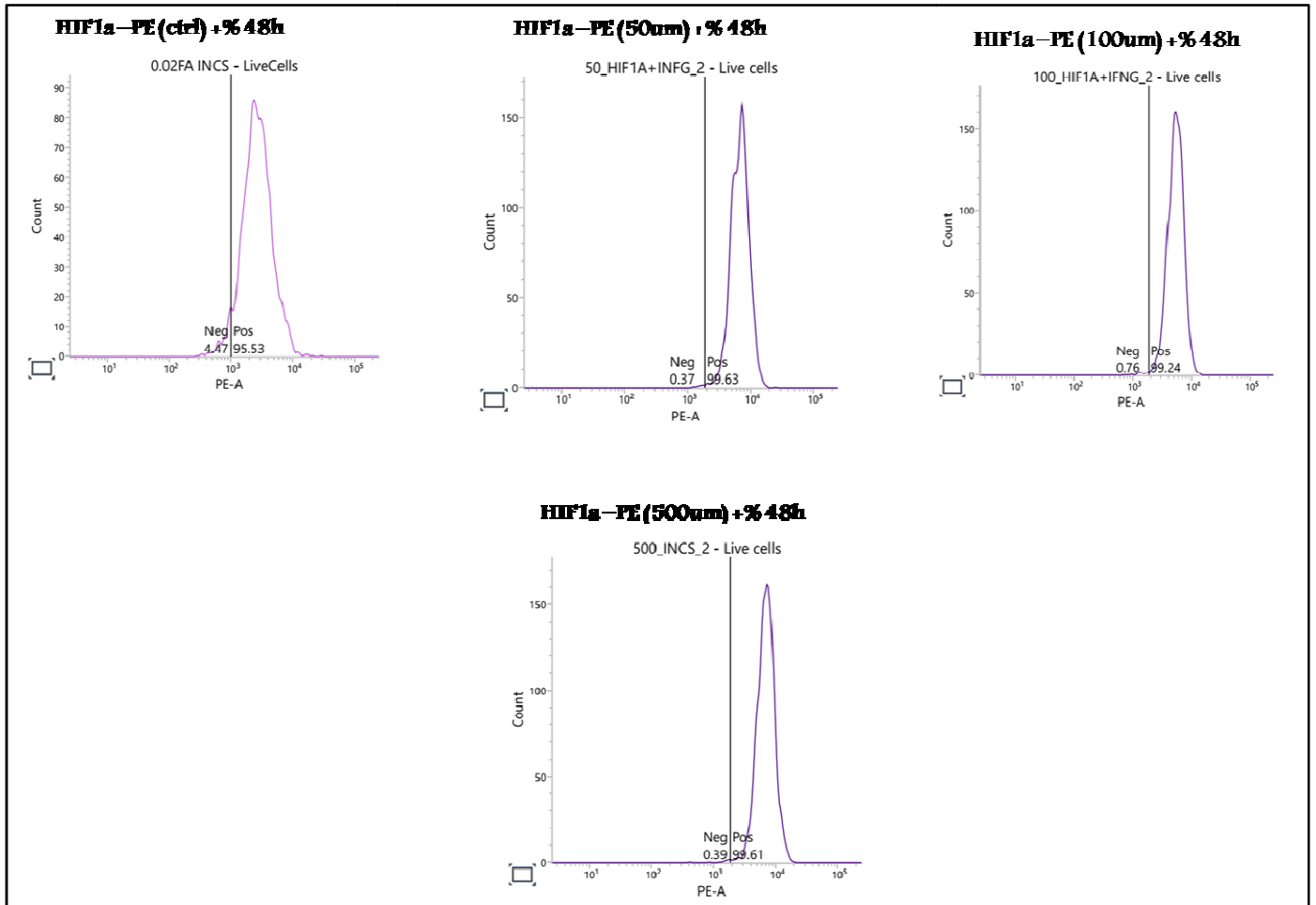


2.3. **HIF1 α +%**:

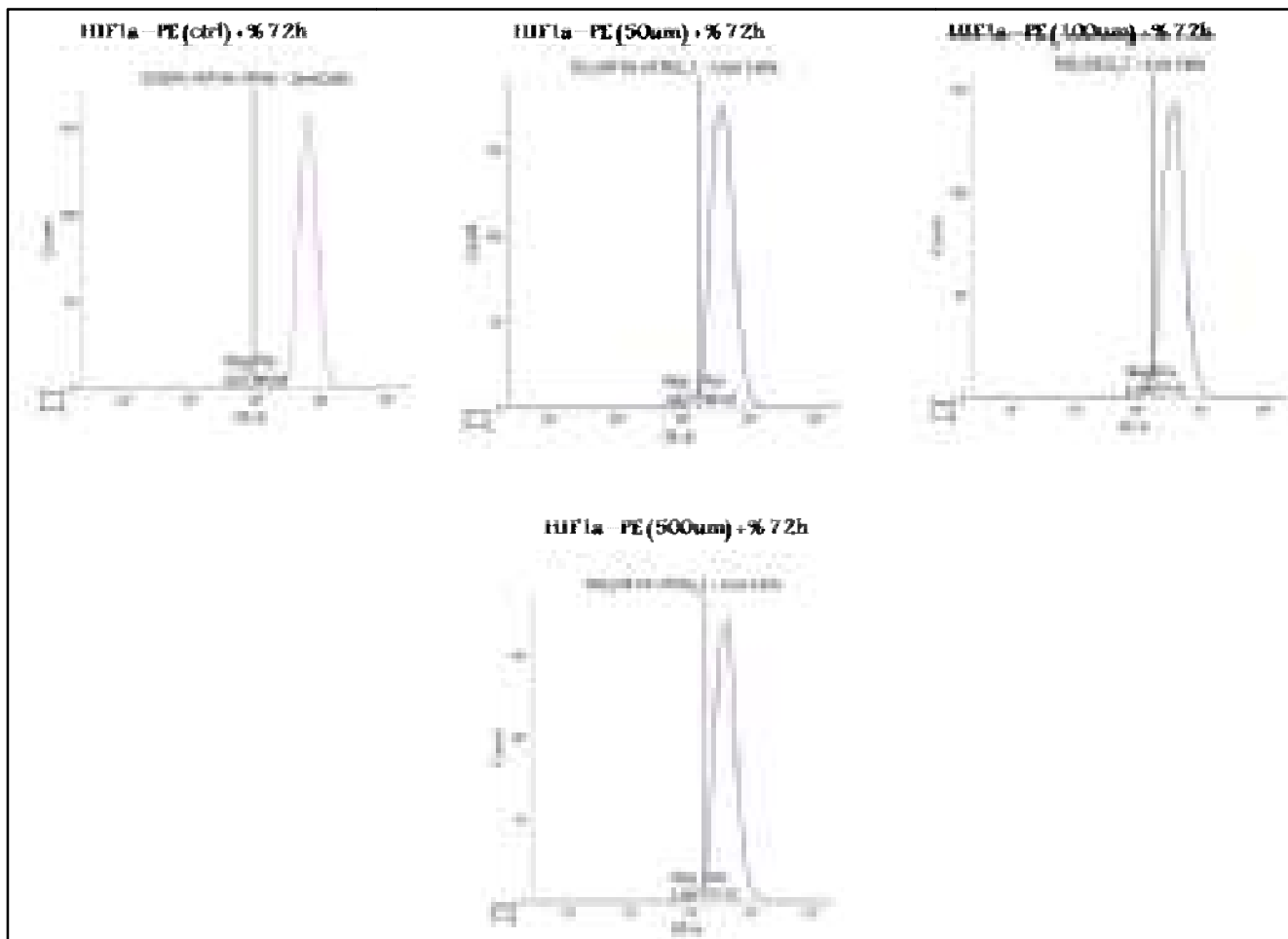
2.3.1. After 24hrs:



2.3.2. After 48hrs:

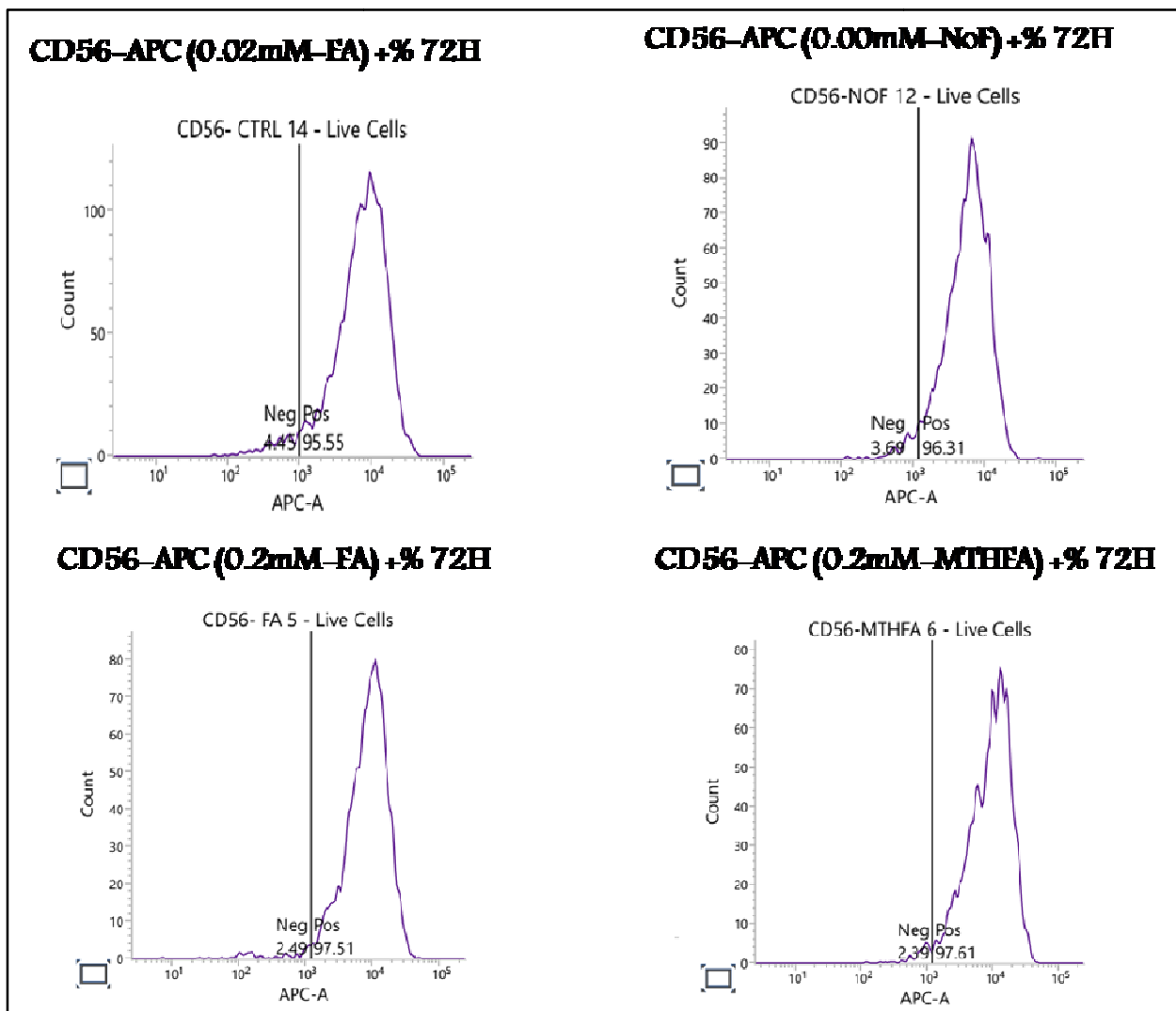


2.3.3. After 72hrs:

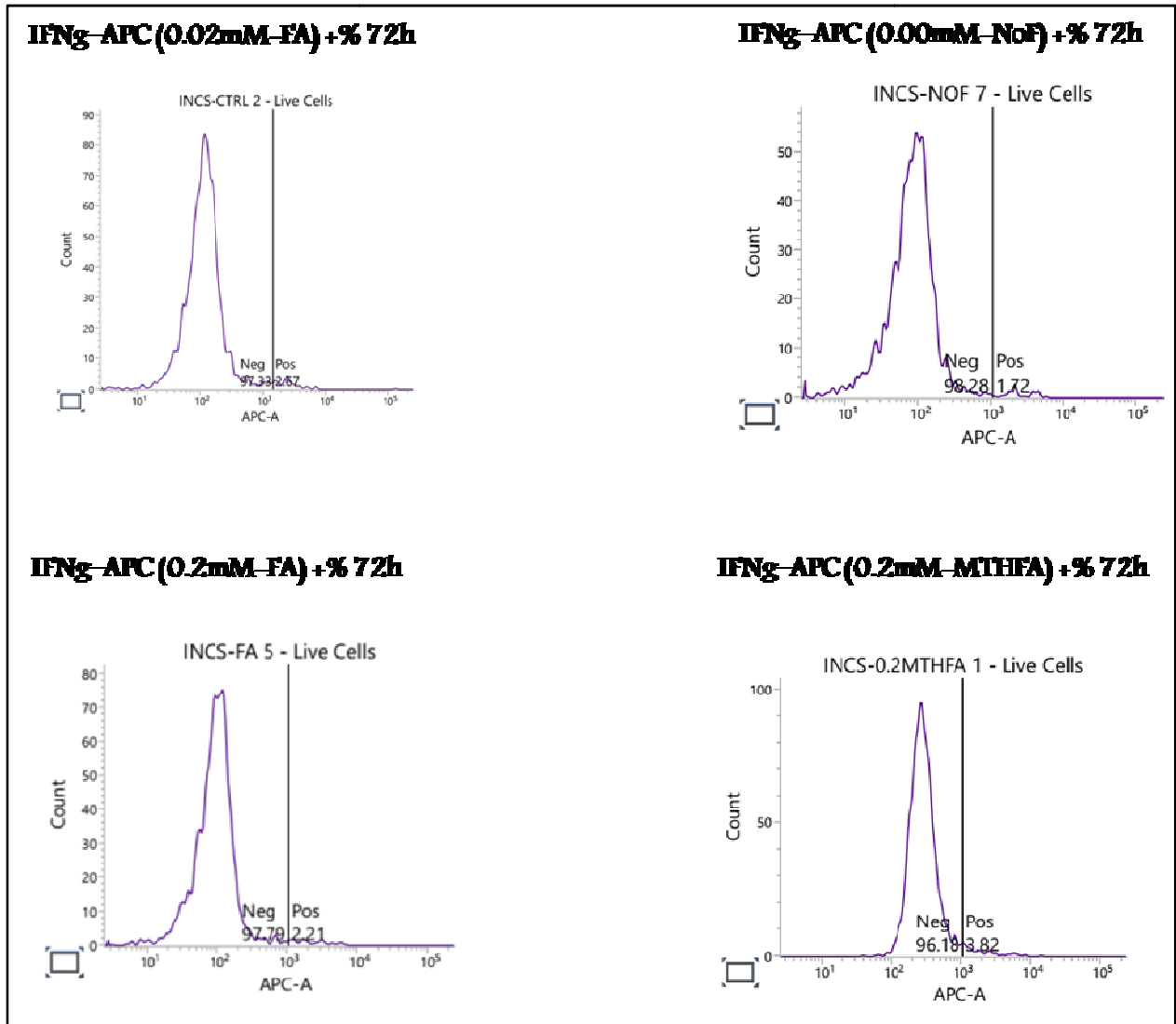


3. Flow cytometry plots show the percentage % of positive NK 92 cell population for CD56, IFN γ and HIF1 α in co-culture settings after 72hrs in different folate treatments (0.02mM of FA as control, 0.2mM of either FA or 5-MTHFA and no exogenous folate added; NoF) :

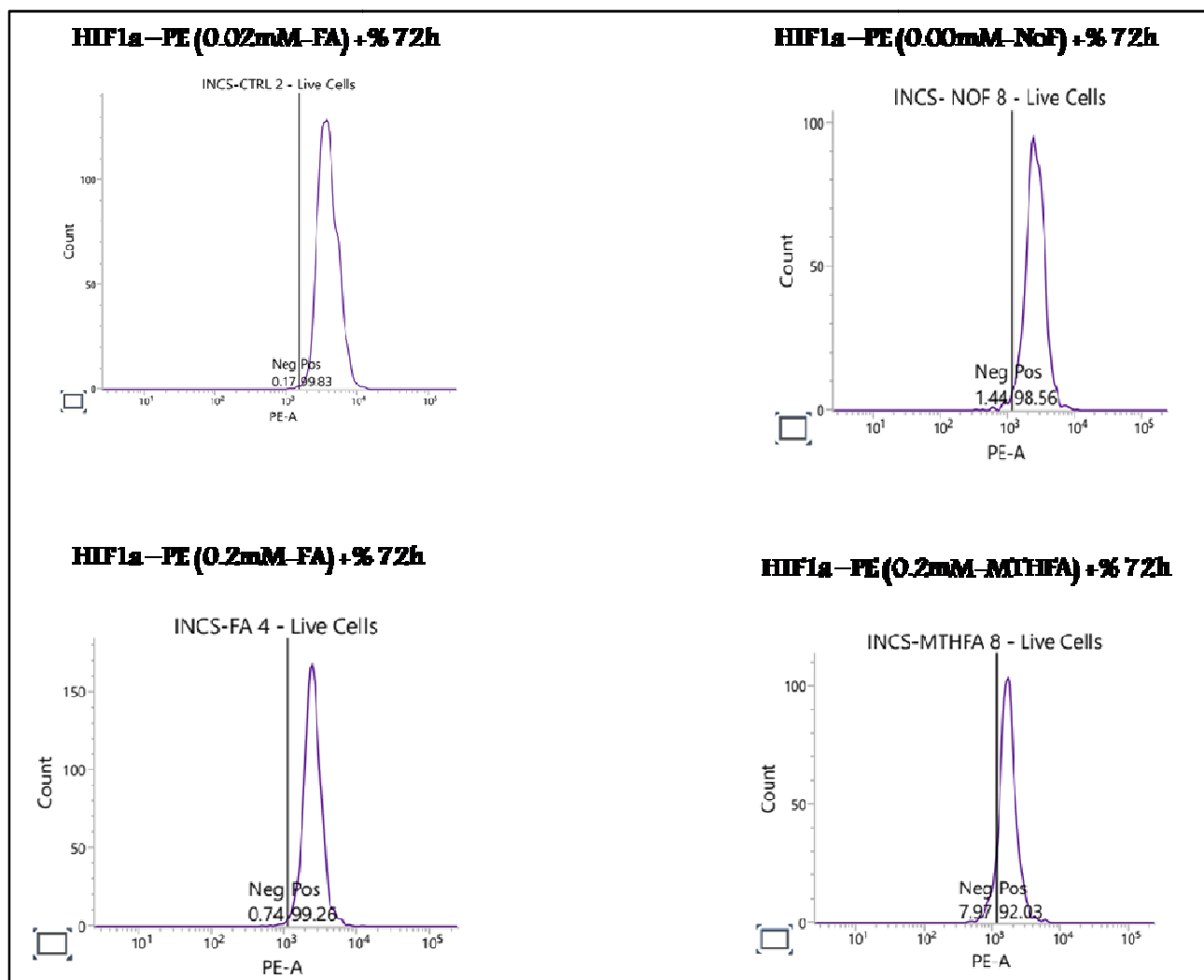
3.1. CD56+%:



3.2. IFN γ +%:

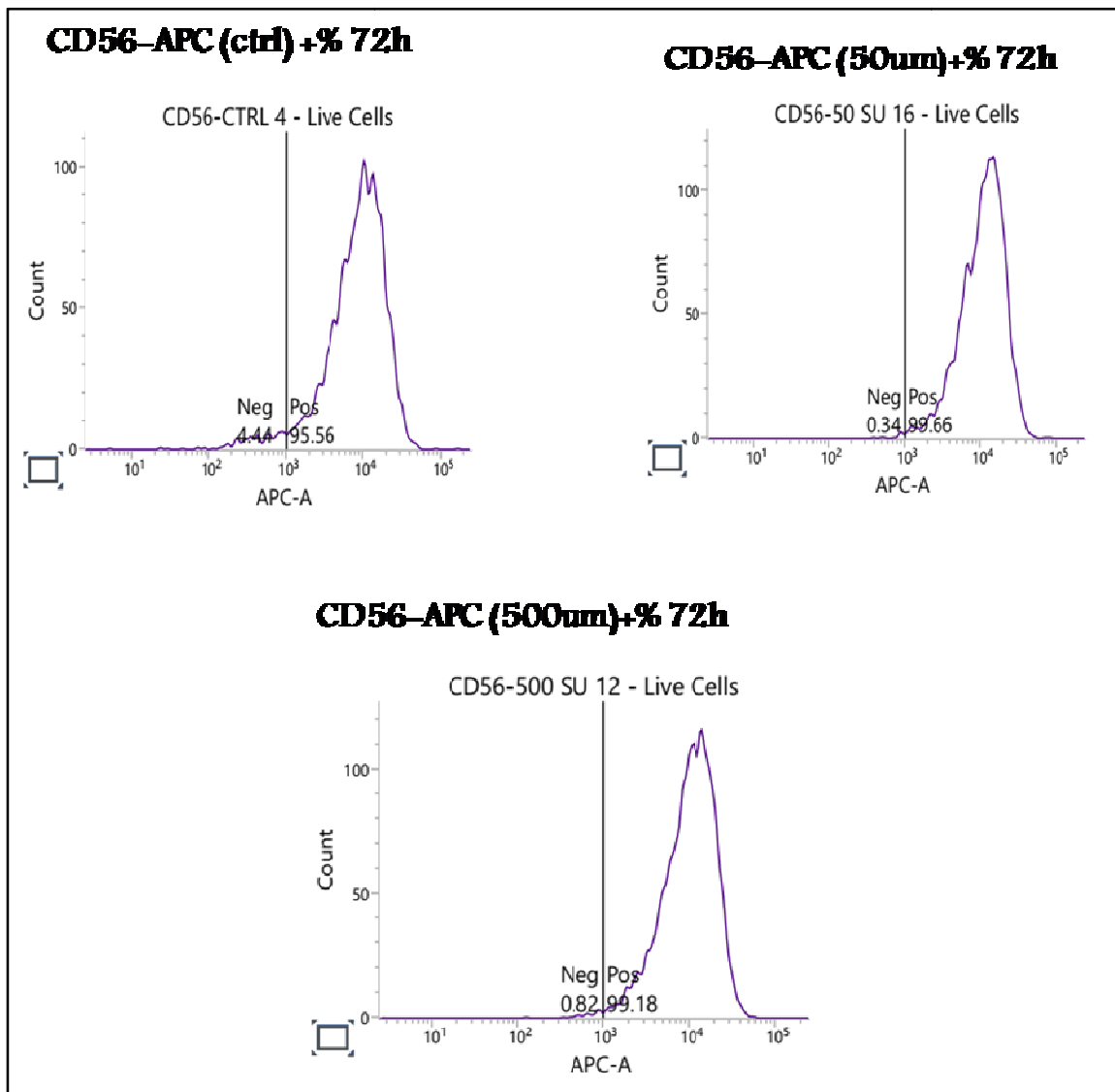


3.3. HIF1 α + %:

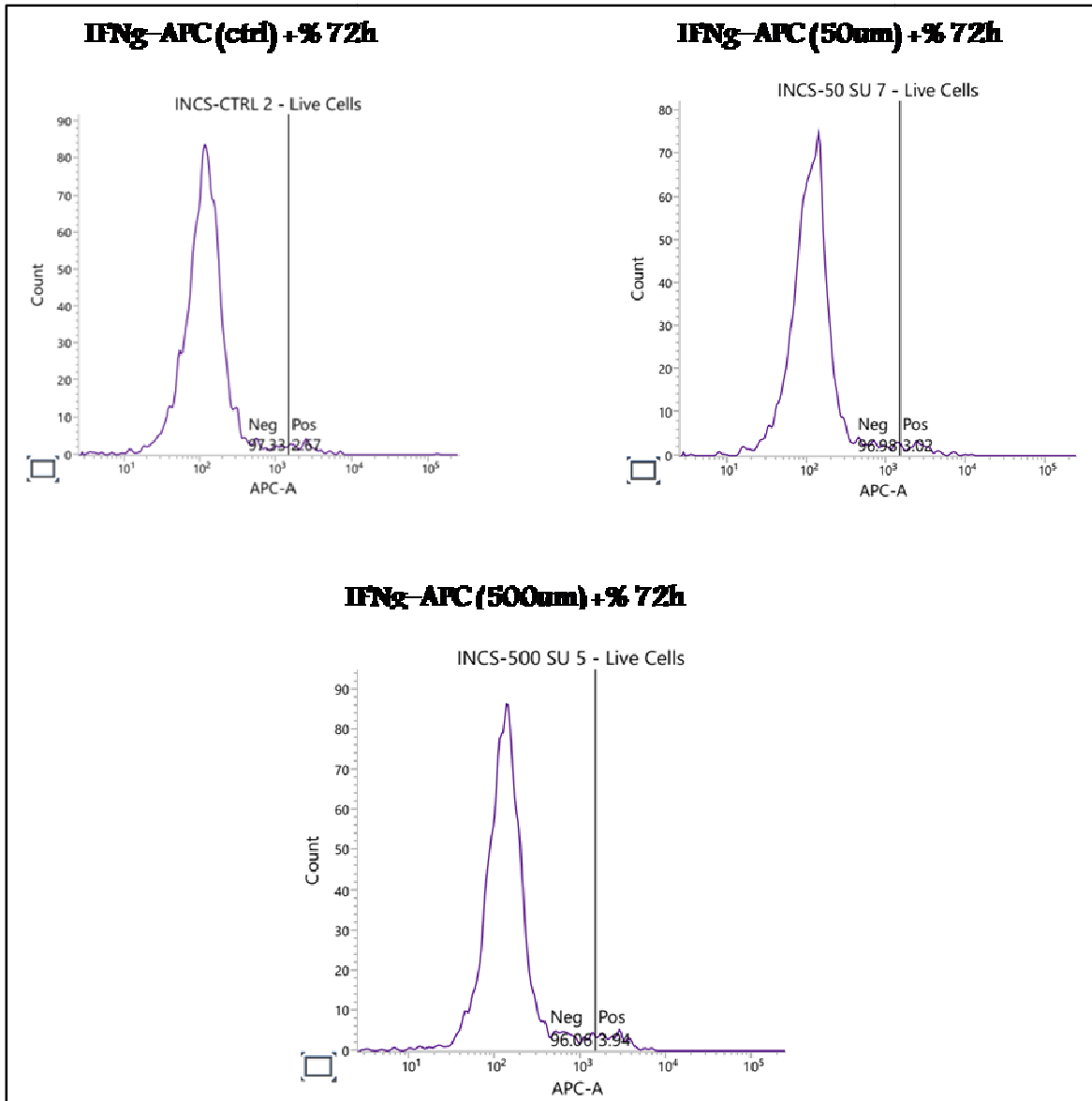


4. Flow cytometry plots show the percentage % of positive NK 92 cell population for CD56, IFN γ and HIF1 α in co-culture settings after 24hrs, 48hrs and 72hrs treated with different succinate concentrations (50 μ M and 500 μ M):

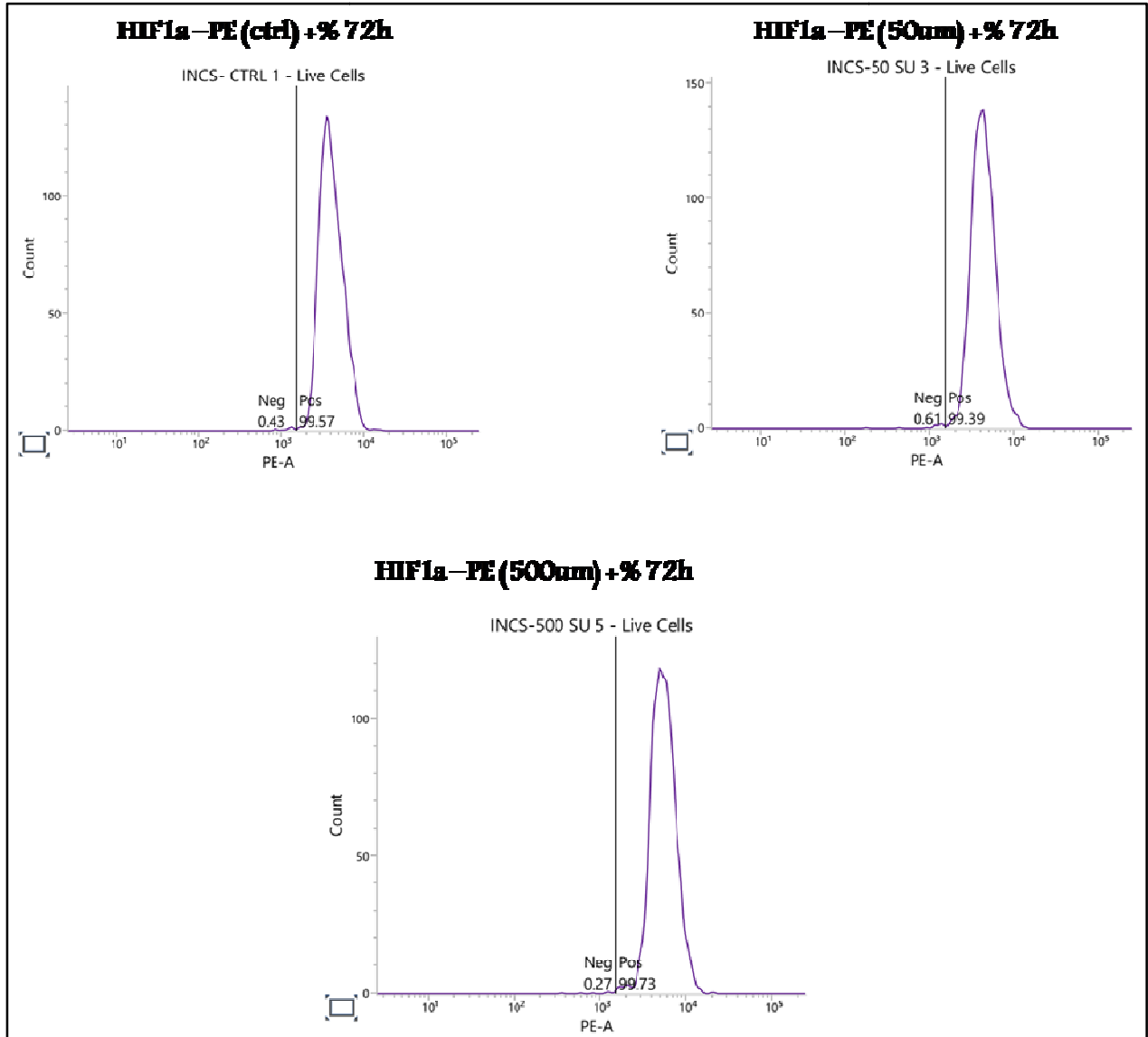
4.1. CD56 +%:



4.2. IFN γ + %:

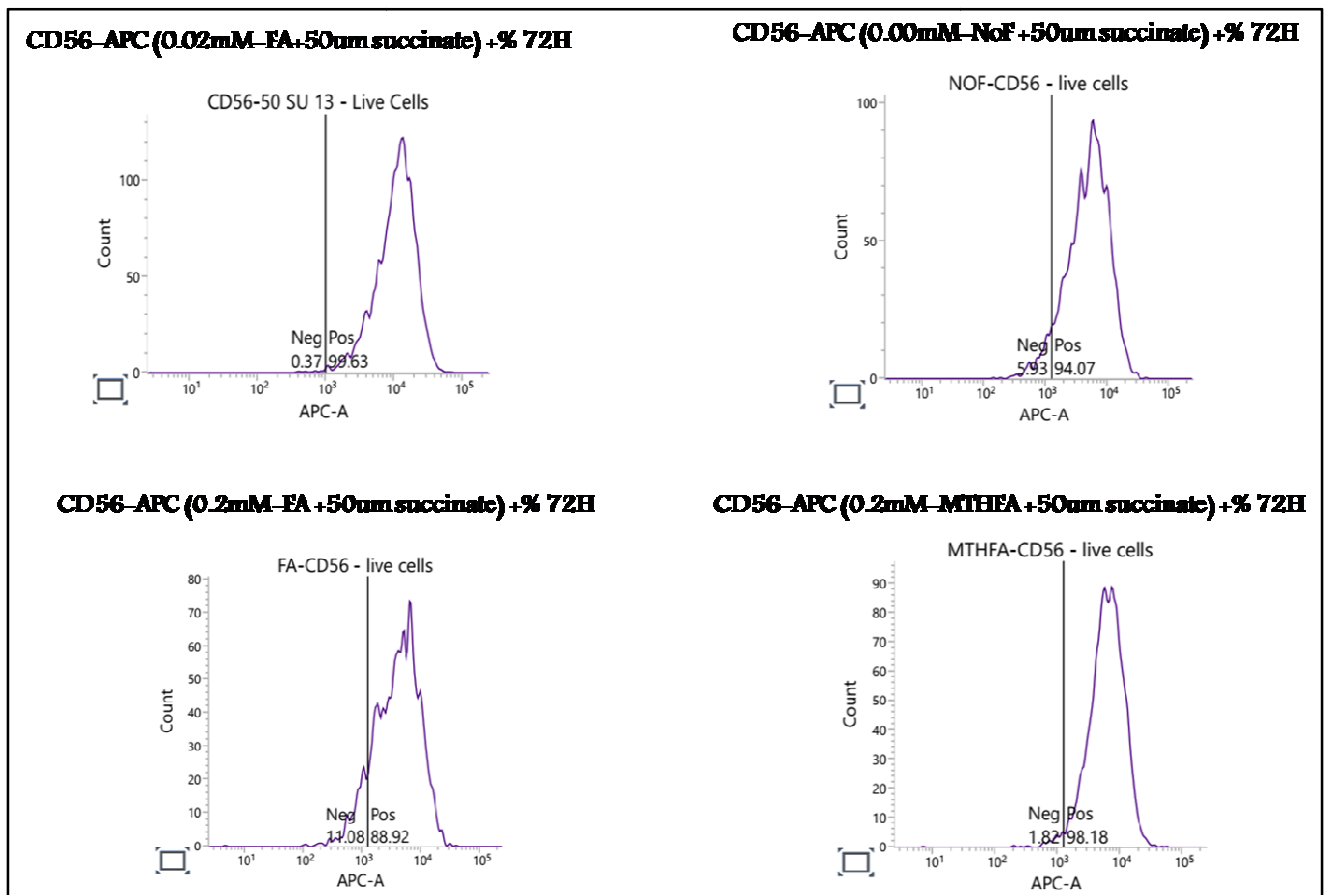


4.3. **HIF1 α +%**:

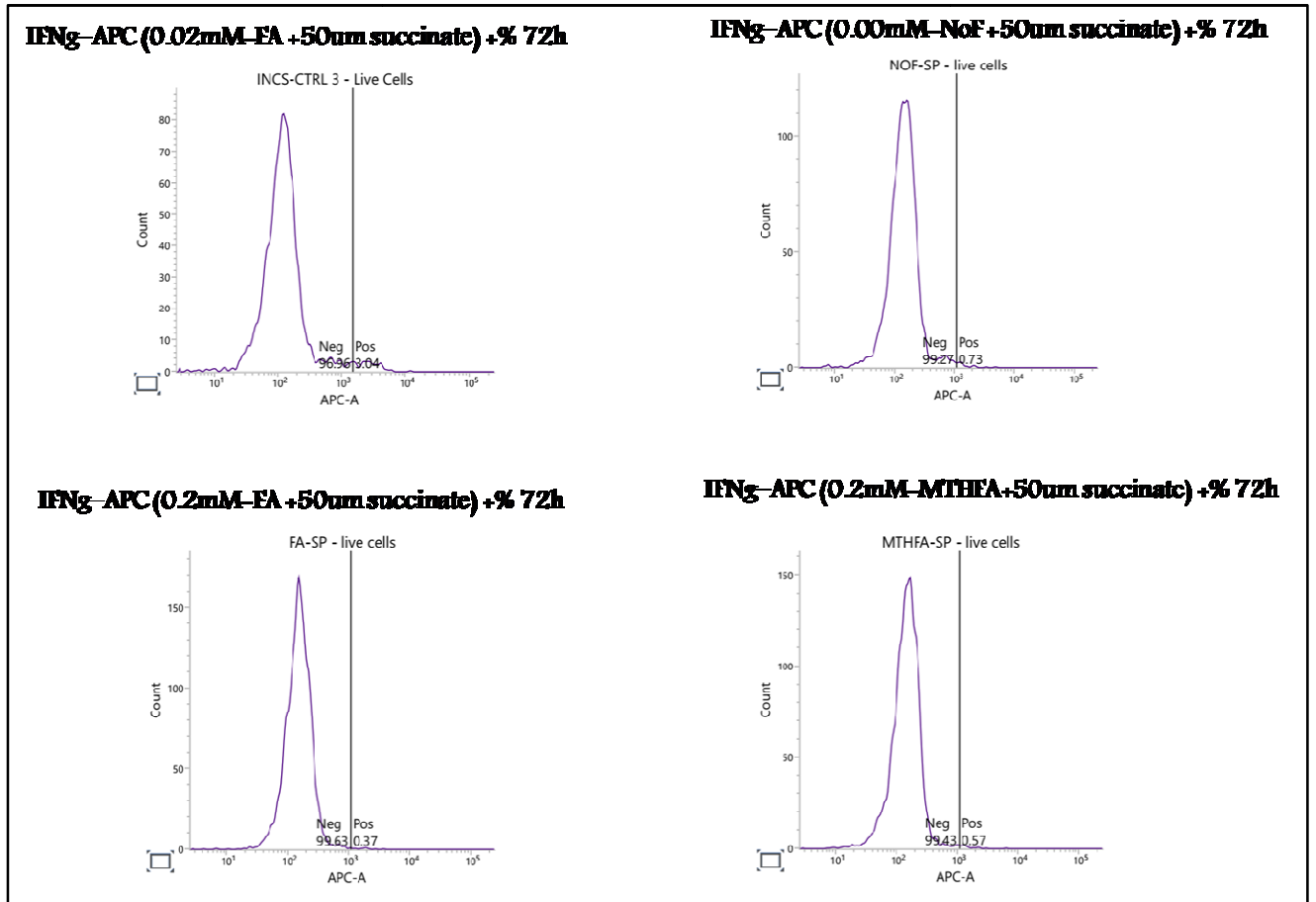


5. Flow cytometry plots show the percentage % of positive NK 92 cell population for CD56, IFN γ and HIF1 α in co-culture settings after 72hrs in different folate treatments (0.02mM of FA as control, 0.2mM of either FA or 5-MTHFA and no exogenous folate added; NoF) with 50 μ M of succinate:

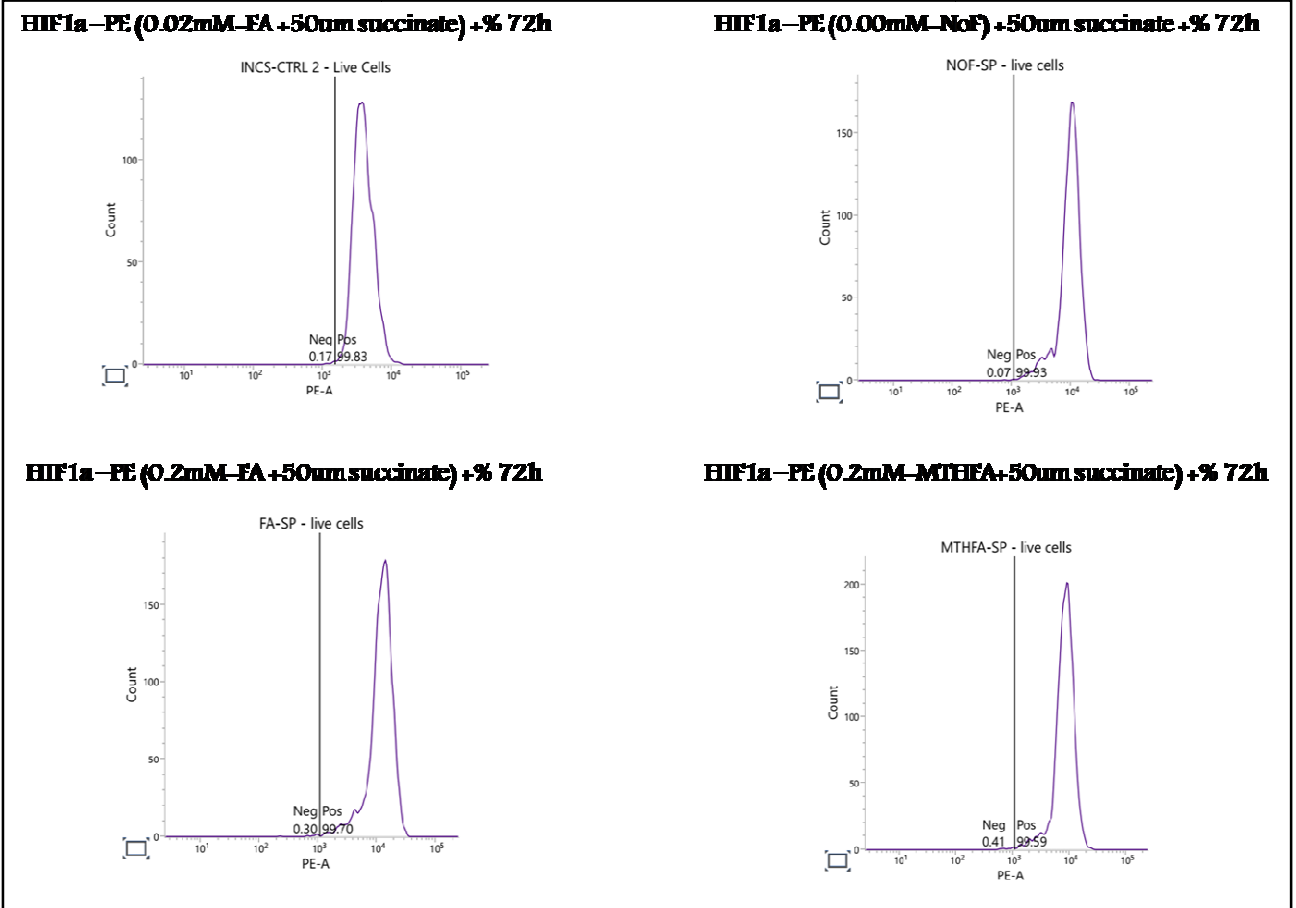
5.1. CD56 +%:



5.2. IFN γ +%:

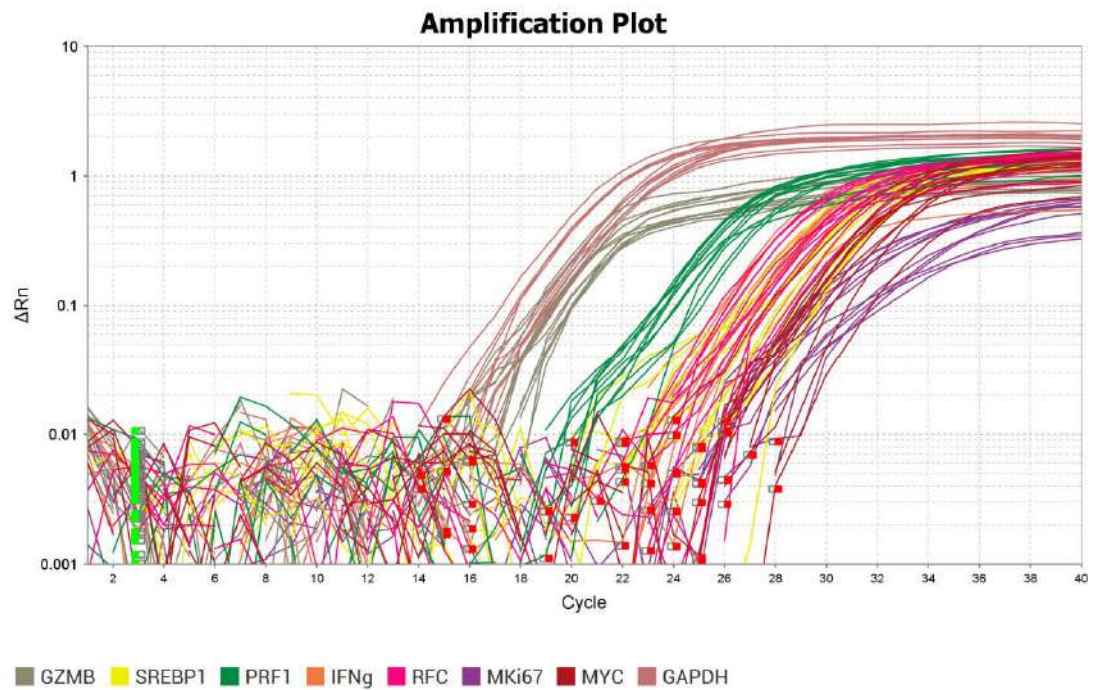
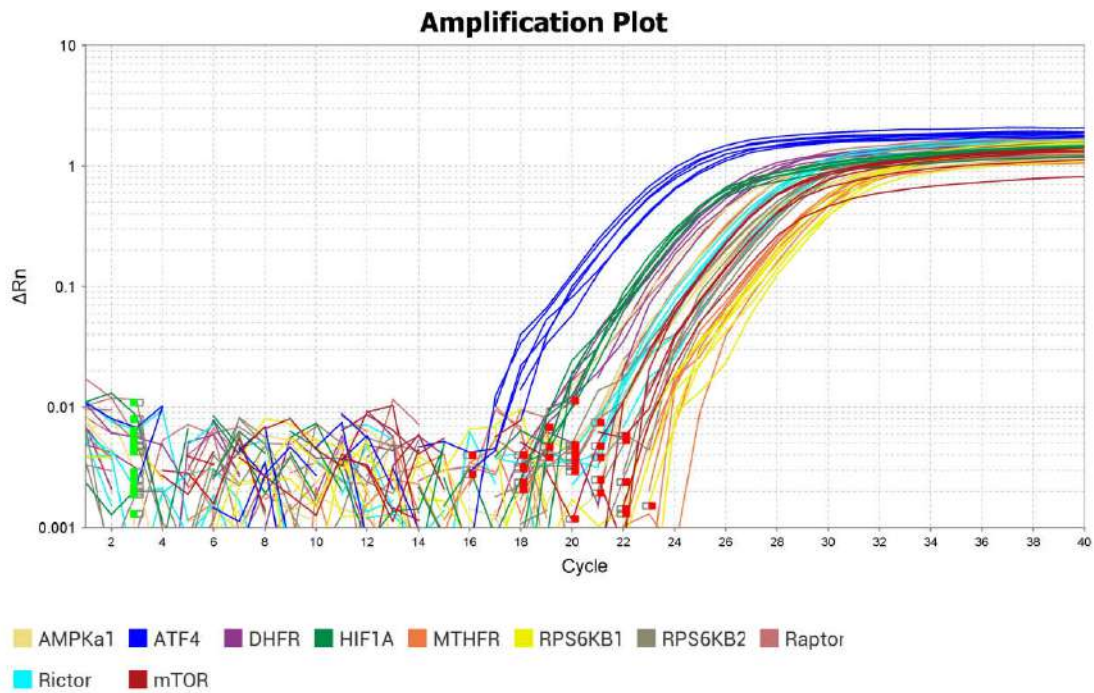


5.3. HIF1 α +%:

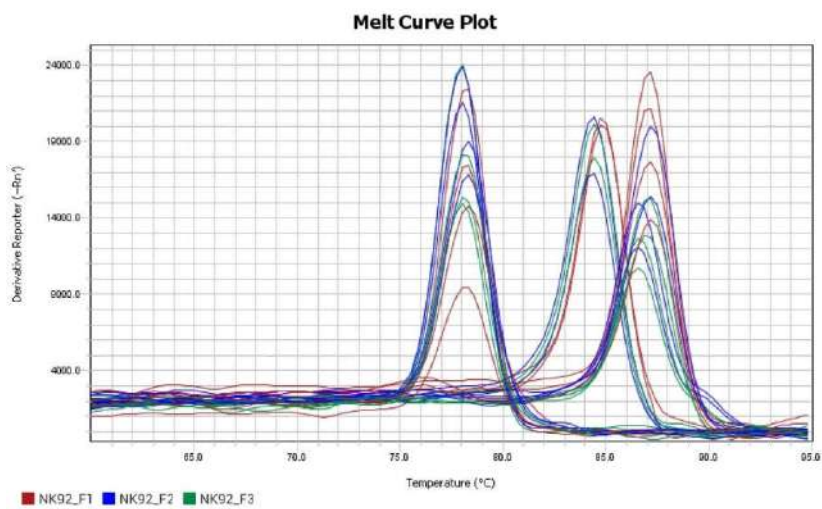
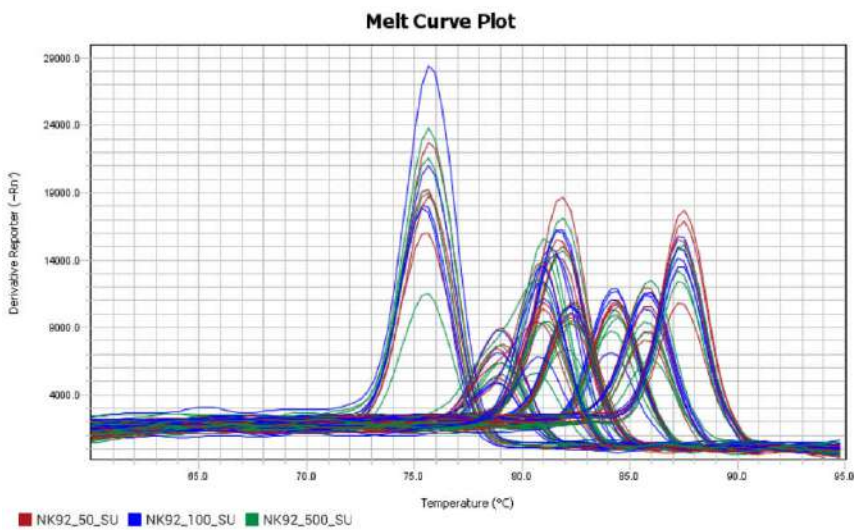
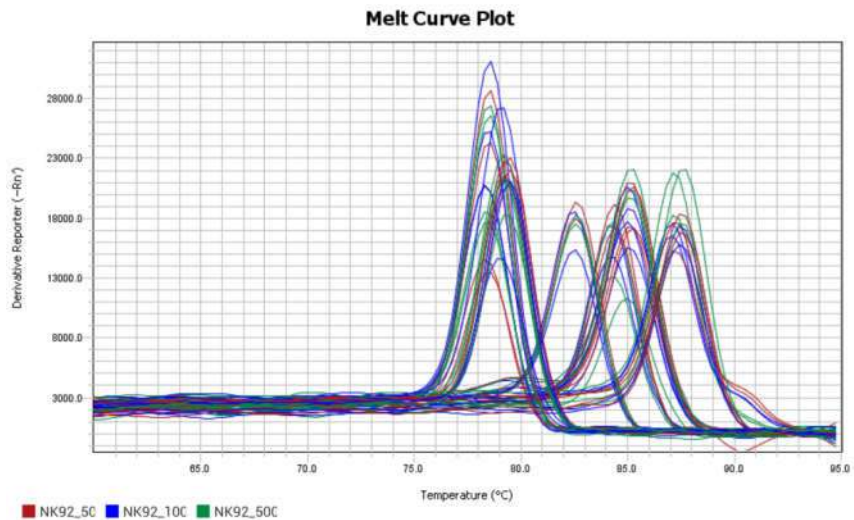


*** Appendix II ***

1. Amplification plots of genes studied in folate metabolism and mTOR signaling pathways:



2. Meltcurve plots for amplification of genes studied in folate metabolism and mTOR signaling pathways:



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