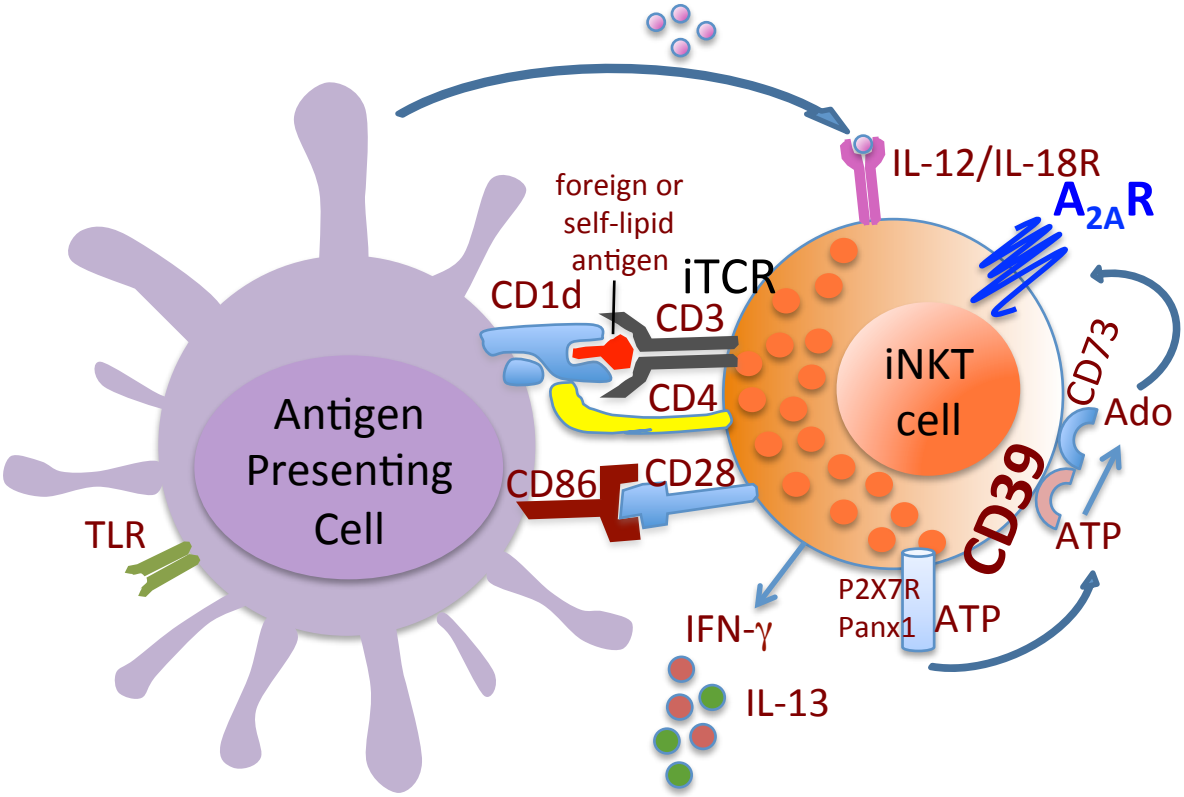
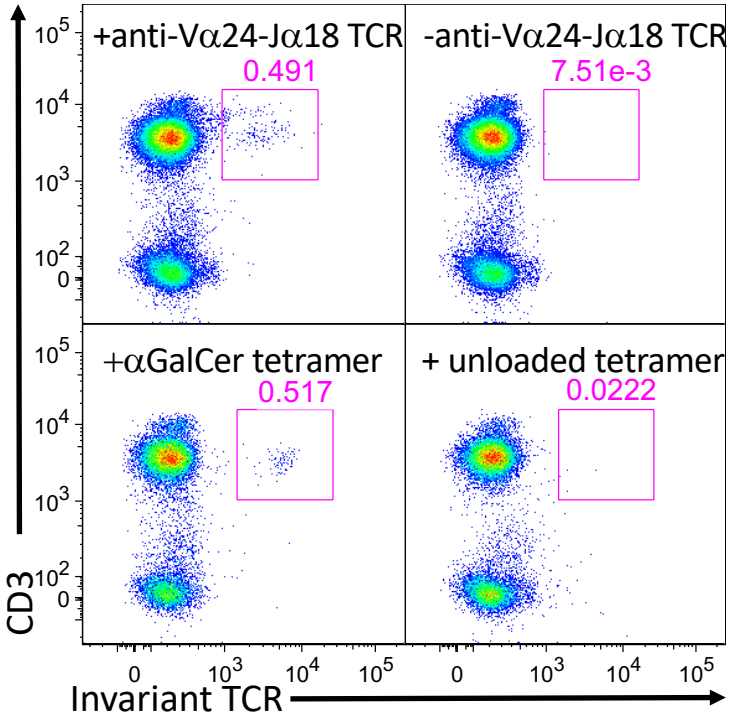
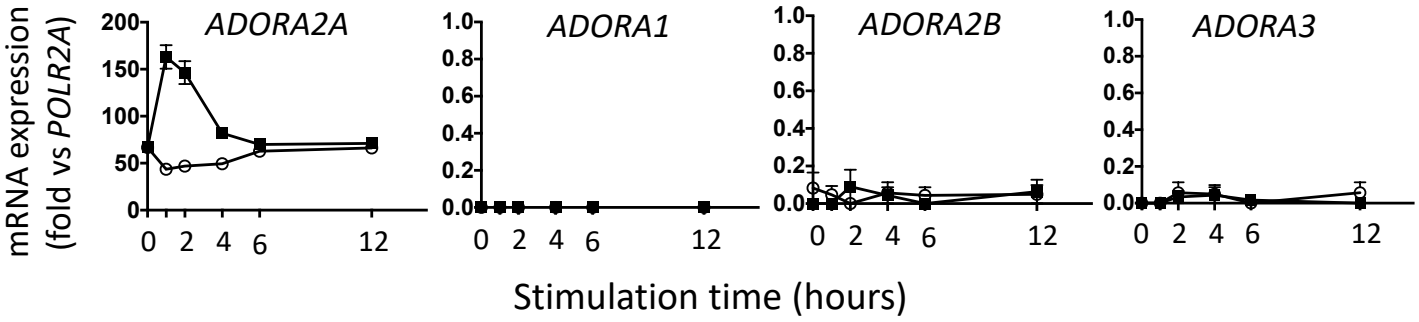


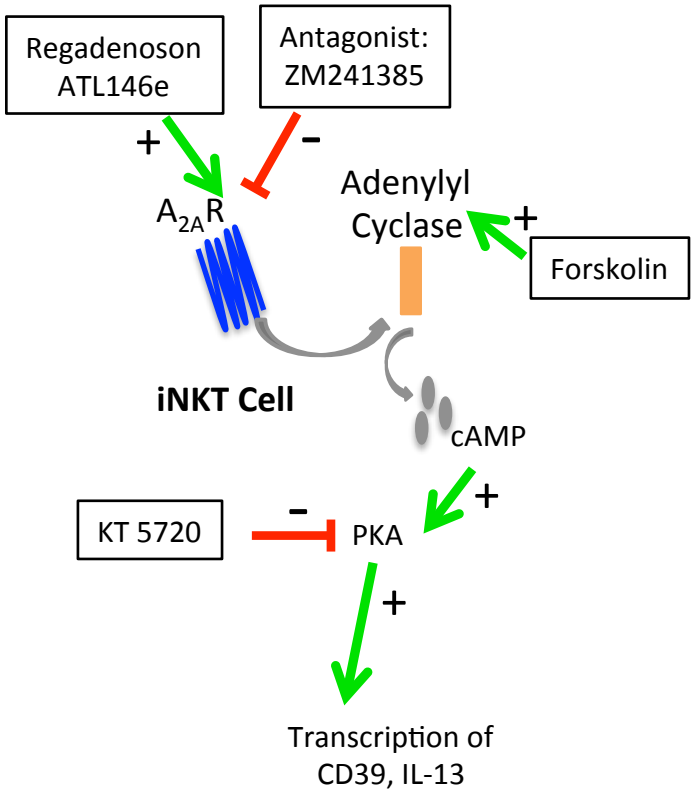
Supplemental figure 1. Diagram showing pathways of iNKT activation and induction of purinergic signaling molecules. Purified human iNKT cells in culture can be stimulated by lipid antigen presentation to the invariant TCR or by plate-bound αCD3 antibodies and co-stimulation with soluble αCD28 antibodies, or by cytokines IL-12/IL-18. Stimulated cells produce Th1 cytokines such as IFN-γ and Th-2 cytokines such as IL-13. Upon stimulation of iNKT cells there is an induction of P2X7 receptors that can interact with pannexin 1 to form pores large enough to conduct ATP. iNKT cell activation also induces CD39 and CD73 that together convert ATP in the extracellular space to adenosine. The $A_{2A}R$, which binds adenosine to produce anti-inflammatory signaling is also induced by iNKT cell activation.



Supplemental figure 2. Validation of antibody 6B11 for detecting human iNKT cells. PBMCs (5 x 10^5) isolated from a healthy adult donor were immunostained to identify iNKT cells positive for expression of CD3 and the invariant TCR identified with either FITC conjugated anti-human Valpha24-Jalpha18 TCR antibody (6B11) or with FITC conjugated αGalCer loaded tetramers. Negative controls consisted of FMO (absence of 6B11 antibody) or FITC conjugated unloaded tetramers. The results of typical of triplicate experiments.



Supplemental figure 3. Expression of adenosine receptor transcripts in ustimulated (○) and stimulated (●) human iNKT cells. Cells were stimulated with 5 ug/ml plate bound anti-CD3 for the indicated times. Messenger RNA expression is normalized to the housekeeping gene, POLR2A.



Supplemental figure 4. Diagram showing the effects of drugs that control transcription of CD39 and IL-13 in iNKT cells. Ragadenoson and ATL146e are agonists and ZM241385 is an antagonist of adenosine A2A receptor. A2AR activation or forskolin stimulate adenylyl cyclase to elevate cAMP and activate protein kinase A and enhance the production of CD39 and IL-13. The cell-permeable inhibitor, KT 5720, blocks PKA activation and counteracts the effects of $A_{2A}R$ agonists and forskolin.