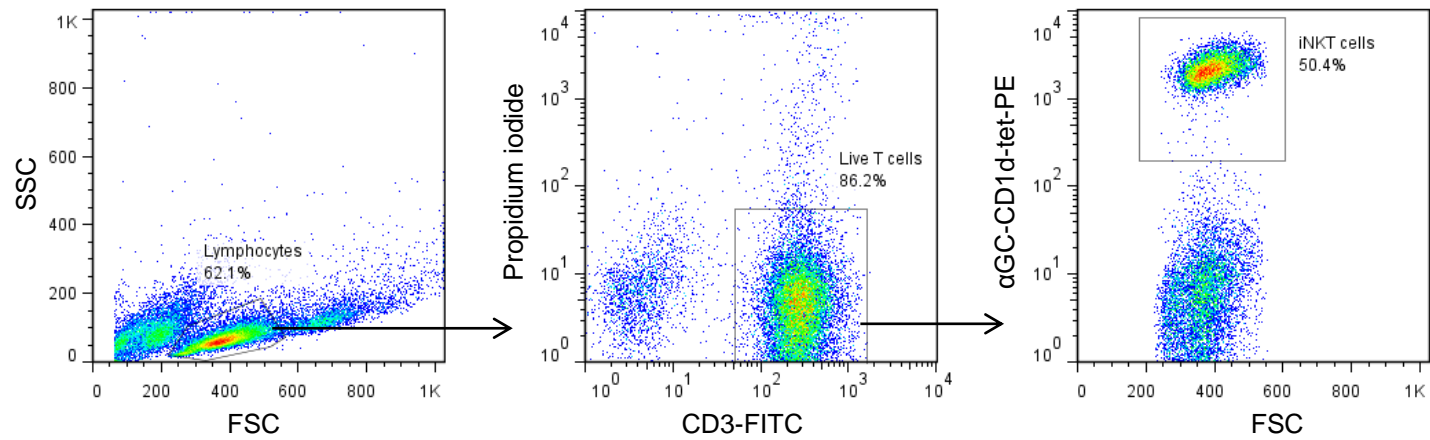


Species (common name)	α 2 helix of CD1d	NCBI accession / Ensembl protein ID	
<i>Homo sapiens</i> (human)	LNQDK- <u>W</u> -TRETQVWLL	AAA59673.1	↑ Old-world monkeys and apes
<i>Pan troglodytes</i> (chimpanzee)	LNQDK- <u>W</u> -TRETQVWLL	BAE16552.2	
<i>Pongo abelii</i> (orang-utan)	LNQDK- <u>W</u> -TRETQVWLL	ENSPPYP00000000793	
<i>Nomascus leucogenys</i> (gibbon)	LNQDK- <u>W</u> -TRETQVWLL	XP_003258696.1	
<i>Macaca mulatta</i> (rhesus macaque)	LNQDN- <u>W</u> -TKETQVWLL	BAE16472.1	
<i>Chlorocebus aethiops</i> (green monkey)	LNQDK- <u>W</u> -TRETQVWLL	BAE16549.1	
<i>Callithrix jacchus</i> (marmoset)	LNQHQ- <u>G</u> -TKETVHWLL	ENSCJAP00000035312	
<i>Otolemur garnetti</i> (small-eared galago)	LNKDQ- <u>G</u> -TRETQVWLL	ENSOGAP00000000115	
<i>Microcebus murinus</i> (grey mouse lemur)	LNQDQ- <u>G</u> -TRETQVWLL	ENSMICP000000005201	
<i>Tupaia belangeri</i> (Northern treeshrew)	LNQDR- <u>G</u> -TKEMLQELL	ACL35308.1	
<i>Sorex araneus</i> (European shrew)	INQDR- <u>G</u> -TSETQVWLL	ENSSARG00000000647	
<i>Cavia porcellus</i> (guinea pig)	LNKDR- <u>G</u> -TREMVSLL	ACN18275.1	
<i>Mus musculus</i> (mouse)	LNADQ- <u>G</u> -TSATVQMLL	NP_031665.2	
<i>Rattus norvegicus</i> (rat)	LNADQ- <u>G</u> -TRETQVILL	NP_058775.1	
<i>Oryctolagus cuniculus</i> (rabbit)	LNLDH- <u>G</u> -TREMIEELL	ACN18276.1	
<i>Spermophilus tridecemlineatus</i> (squirrel)	LNQDK- <u>G</u> -TKETMQWLL	ENSSTOP000000009436	
<i>Marmota monax</i> (groundhog)	LNQDE- <u>G</u> -TKETQVWLL	ABU40144.1	
<i>Myotis lucifugus</i> (little brown bat)	LNKDQ- <u>Y</u> -TRDTLEWLL	ENSMLUP00000011966	
<i>Sus scrofa</i> (pig)	LNEDQ- <u>G</u> -TKETQVWLL	NP_001096150.2	
<i>Bos taurus</i> (cow) ¹	LNQDQ- <u>G</u> -TKETVHWLL	NP_001192310.1	
<i>Ovis aries</i> (sheep) ¹	LNEDQ- <u>G</u> -TKETVHWLL	NP_001116473.1	
<i>Equus caballus</i> (horse)	LNDDQ- <u>G</u> -TREMVSLL	ACN18274.1	
<i>Felis catus</i> (domestic cat)	LNEDQ- <u>G</u> -TRKTLQLLL	ENSFCAG00000012532	
<i>Ailuropoda melanoleuca</i> (giant panda)	LNQDQ- <u>G</u> -TRKTLQSL	ENSAMEP00000004765	
<i>Loxodonta africana</i> (African elephant)	LNLDQ- <u>G</u> -TKETVQSL	ACN18273.1	
<i>Procavia capensis</i> (hyrax)	LNKDK- <u>G</u> -TREMVSLL	ENSPCAP00000000930	
<i>Echinops telfairi</i> (lesser hedgehog tenfec)	LNQDE- <u>V</u> -TTEMAQHLL	ENSETEG00000015412	
<i>Dasyus novemcinctus</i> (armadillo)	LNQDQ- <u>G</u> -TLEIVQWLL	ENSDNOP00000014509	
<i>Isodon macrourus</i> (bandicoot) ²	LNQDE- <u>G</u> -TRLMLQSL	ABI99485.1	
<i>Gallus gallus</i> (chicken) ²	LMANA- <u>S</u> -TLNEVIQVLL	NP_001017412.1	

Supporting Information Figure 1. Alignment of α 2-helix forming amino acids of published CD1d sequences, showing conservation of W155 in catarrhines (apes and Old World monkeys) and of G153 in nearly all other species. 1. Pseudogene. 2. CD1 protein, but not orthologous to any specific eutherian isoform.



Supporting Information Figure 2. Gating strategy for enumeration of iNKT populations in lipid-treated PBMC cultures (as used for generating data shown in figure 1a). Shown is an example of a KRN7000 stimulated in vitro culture: Forward/side scatter characteristics were used to define region 1 (R1) containing lymphocytes (left density plot). Propidium iodide exclusion and staining with FITC-conjugated anti-CD3 antibody were used to define region 2 (R2), and from this live T lymphocytes were identified by gating cells on (R1+R2)(middle density plot), and live iNKT cells were identified as α GC-CD1d tetramer positive cells in gate(R1+R2) (right density plot). All flow cytometry data were acquired on a BD FACSCalibur, and data were analysed using CellQuest Pro software.