



Supplementary Fig. 1. (a) $\gamma\delta$ T cells are present in the normal joint and increased in diseased joints. DBA/1 lac J mice were injected with collagen/CFA and diseased joints taken on day 35. Joints were stained and compared with joints taken from mice that had not received any injections. Only diseased joints from collagen injected mice were analyzed. (b) Intracellular cytokine staining on day 26 for IL-17 in cells from the joints of collagen/CFA injected mice.

<u>Vγ4</u>	<u>N</u>	<u>Jγ1</u>	
tgttcctacgg	tctat	atagctcaggt	1/23
C S Y G	L	Y S S G	
tgttcctacgg	ccttt	atagctcaggt	1/23
C S Y G	L	Y S S G	
tgttcctacgg	cttat	atagctcaggt	4/23
C S Y G	L	Y S S G	
tgttcctacgg	ct	atagctcaggt	5/23 germline (22%)
C S Y G		Y S S G	
tgttcctacgg	cccat	atagctcaggt	
C S Y G	P	Y S S G	
tgttcc	ggg	agctcaggt	
C S	G	S S G	
tgttcctacgg	cggat	atagctcaggt	
C S Y G	G	Y S S G	
tgttcctacgg	caagagg	agctcaggt	
C S Y G	K R	S S G	
tgttcctacgg	c	agctcaggt	
C S Y G		S S G	
tgttcctacgg	cgaat	atagctcaggt	
C S Y G	E	Y S S G	
tgttcctacgg	ggtat	atagctcaggt	
C S Y G	V	Y S S G	
tgttcctacgg	ga	atagctcaggt	
C S Y G		N S S G	
tgttcctacgg	ctacg	gctcaggt	
C S Y G	Y	G S G	
tgttcctacgg	gg	atagctcaggt	
C S Y G		D S S G	
tgttcctacgg	cgcatt	atagctcaggt	
C S Y G	A	Y S S G	
tgttcctacgg	ctcct	atagctcaggt	
C S Y G	S	Y S S G	

Supplementary Fig. 2. V γ 4 sequences in the lymph nodes of naive DBA/1 mice

<u>Vδ4</u>	<u>N/Dδ1/N</u>	<u>Dδ2</u>	<u>N</u>	<u>Jδ</u>
ctcatggagcg	cggt	atcggagggatacagag		ctaccgacaaa
L M E R	G	I G G I R		A T D K
ctcatggagcg	gggg	atcggagggatac	aggctcggg	ccgacaaa
L M E R	G	I G G I	Q A R	A D K
ctcatggagcg	cgaagg	cggagggatacag	tg	ctaccgacaaa
L M E R	E G	G G I R		A T D K
ctcatggagcg	cgaatggtggcaccgatcg	atcggagggata	g	ctaccgacaaa
L M E R	E W W H R S	I G G I		A T D K
ctcatggagcg	cctgcgcccgggt	atcggaggg	taccctctg	ctaccgacaaa
L M E R	L R P G	I G G	Y P S	A T D K
ctcatggagcg	cgagacat	atcggagggat	ccag	ctaccgacaaa
L M E R	E T	Y R R D	P	A T D K
ctcatggagcg	cgctgcggcat	atcggagggat	aaa	accgacaaa
L M E R	A A A	Y R R D	K	T D K
ctcatggagcg	tgcatatg	tcggaggg	g	taccgacaaa
L M E R	G I C	R R	G	T D K
ctcatggagcg	cggtatatg	tcggagggat	g	ctaccgacaaa
L M E R	G I C	R R D		A T D K
ctcatggagcg	cgttctc	cgg	g	ctaccgacaaa
L M E R	V L	R		A T D K
ctcatggagcg	cgcc	cggagggatacag	cgg	accgacaaa
L M E R	A	R R D T	R	T D K
ctcatggagc	tcgggccatca	gagggatacagag	t	ccgacaaa
L M E	L G P S	E G Y E		S D K
ctcatggagcg	gct	atcggagggatacagag	ctg	accgacaaa
L M E R	L	S E G Y E	L	T D K

Supplementary Fig. 3. Vδ4 sequences in the lymph nodes of naive DBA/1 mice