

Extended Data Table 4. Unexpanded clonotypes of CD8+ Tconv cluster 3 with a shared CDR β sequence with the dominantly-expanded clonotypes. Unexpanded clonotypes from CD8 Tconv cluster 3 of blister fluids 1-3 are shown that have the exact same CDR3 β CASSPDRGGYEQYF sequence as the dominantly-expanded TCR+ population or a single mismatch (underlined). The 'Dual TCR' column indicates if this n=1 count TCR is expressed on a dual TCR+ cell (yes or no). TCRs expressed on the same dual TCR+ cell are indicated by the same symbol (o, ●, ◊, ‡). *Tconv*, *T conventional cell*; *TCR*, *T-cell receptor*; *TRAV*, *TCR alpha variable*; *TRBV*, *TCR beta variable*; *TRAJ*, *TCR alpha joining*; *TRBJ*, *TCR beta joining*; *CDR3*, *complementary-determining region*; *Ct.*, *count*.

Blister fluid 1 (ARM, 338 unexpanded cells from CD8 Tconv cluster 3)

TCR	CDR3 α	CDR3 β	TRAV	TRAJ	TRBV	TRBJ	Dual	
							Ct.	TCR+
1	CAVQAFRQTGANNLFF	CASSH <u>DR</u> GGYEQYF	TRAV20	TRAJ36	TRBV27	TRBJ2-7	1	yes o
2	CALSEVTTSGTYKYIF	CASSH <u>DR</u> GGYEQYF	TRAV19	TRAJ40	TRBV27	TRBJ2-7	1	yes o
3	CVVATNAGGTSYGKLTFF	CASSPDRGGYEQYF	TRAV10	TRAJ52	TRBV27	TRBJ2-7	1	yes
4	CALSEVTTSGTYKYIF	CASSR <u>DR</u> GGYEQYF	TRAV19	TRAJ40	TRBV27	TRBJ2-7	1	no
5	CAAIDSWGKLOF	CASSL <u>DR</u> GGYEQYF	TRAV23/DV6	TRAJ24	TRBV11-2	TRBJ2-7	1	yes ‡
6	CALSEVRTSGTYKYIF	CASSL <u>DR</u> GGYEQYF	TRAV19	TRAJ40	TRBV11-2	TRBJ2-7	1	yes ‡

Blister fluid 2 (FACE, 181 unexpanded cells from CD8 Tconv cluster 3)

TCR	CDR3 α	CDR3 β	TRAV	TRAJ	TRBV	TRBJ	Dual	
							Ct.	TCR+
1	CALSEVTTSGTYKYIF	CASSH <u>DR</u> GGYEQYF	TRAV19	TRAJ40	TRBV27	TRBJ2-7	1	yes o
2	CAVQAFRQTGANNLFF	CASSH <u>DR</u> GGYEQYF	TRAV20	TRAJ36	TRBV27	TRBJ2-7	1	yes o
3	CAADTGGFKTIF	CASSPDRGGYEQYF	TRAV13-1	TRAJ9	TRBV27	TRBJ2-7	1	yes ●
4	CIVRVHSGGGADGLTF	CASSPDRGGYEQYF	TRAV26-1	TRAJ45	TRBV27	TRBJ2-7	1	yes ●
5	CAVTDNYGQNFVF	CASSPDRGGYEQYF	TRAV25	TRAJ26	TRBV27	TRBJ2-7	1	yes ◊
6	CALSANSNGNTPLVF	CASSPDRGGYEQYF	TRAV16	TRAJ29	TRBV27	TRBJ2-7	1	yes ◊
7	CAVQTNAGNNRKLIF	CASSPDRGGYEQYF	TRAV20	TRAJ38	TRBV27	TRBJ2-7	1	yes
8	CAVKYTGANSKLTFF	CASSPDRGGYEQYF	TRAV12-2	TRAJ56	TRBV27	TRBJ2-7	1	yes
9	CAAGSSSGTYKYIF	CASSPDRGGYEQYF	TRAV13-1	TRAJ40	TRBV27	TRBJ2-7	1	yes

Blister fluid 3 (FOOT, 137 unexpanded cells from CD8 Tconv cluster 3)

TCR	CDR3 α	CDR3 β	TRAV	TRAJ	TRBV	TRBJ	Dual	
							Ct.	TCR+
1	CALSEVTTSGTYKYIF	CASSH <u>DR</u> GGYEQYF	TRAV19	TRAJ40	TRBV27	TRBJ2-7	1	yes o
2	CAVQAFRQTGANNLFF	CASSH <u>DR</u> GGYEQYF	TRAV20	TRAJ36	TRBV27	TRBJ2-7	1	yes o
3	CAASMTSAGNMLTF	CASSV <u>DR</u> GGYEQYF	TRAV23/DV6	TRAJ39	TRBV27	TRBJ2-7	1	yes □
4	CALSEVTTSGTYKYIF	CASSV <u>DR</u> GGYEQYF	TRAV19	TRAJ40	TRBV27	TRBJ2-7	1	yes □
5	CALSEVTTSGTYKYIF	CASSY <u>DR</u> GGYEQYF	TRAV19	TRAJ40	TRBV27	TRBJ2-7	1	yes
6	CALSEVTTSGTYKYIF	CASSF <u>DR</u> GGYEQYF	TRAV19	TRAJ40	TRBV27	TRBJ2-7	1	no