

**Table S1.** Description of the *TRB* genes in the *Capra hircus* chromosome 4 genome assembly (NCBI Reference Sequence CM\_004565.1). The position of all genes and their classification and functionality are reported.

| <b>Gene classification</b> | <b>Functionality</b> | <b>Position<sup>a</sup><br/>(complement)</b> |
|----------------------------|----------------------|--|
| TRBV1                      | F                    | 14984015-14984322                            |
| TRBV3                      | F <sup>b</sup>       | 14907378-14907838                            |
| TRBV4                      | F                    | 14903033-14903488                            |
| TRBV2                      | F                    | 14898809-14899260                            |
| TRBV5-1                    | P                    | 14891298-14891689                            |
| TRBV5-2                    | F                    | 14884857-14885334                            |
| TRBV6-1                    | F                    | 14880001-14880431                            |
| TRBV5-3                    | F                    | 14876102-14876576                            |
| TRBV6-2                    | P                    | 14872197-14872625                            |
| TRBV5-4                    | P                    | 14869595-14870070                            |
| TRBV5-5                    | F                    | 14866561-14867033                            |
| TRBV6-3                    | P                    | 14864812-14865241                            |
| TRBV5-6                    | F                    | 14862535-14863010                            |
| TRBV5-7                    | P                    | 14858129-14858600                            |
| TRBV6-4                    | P                    | 14855092-14855522                            |
| TRBV5-8                    | F                    | 14852745-14853220                            |
| TRBV6-5                    | F                    | 14850941-14851370                            |
| TRBV6-6                    | F                    | 14847814-14848244                            |
| TRBV5-9                    | F                    | 14844870-14845326                            |
| TRBV6-7                    | P                    | 14840298-14840725                            |
| TRBV5-10                   | P                    | 14837991-14838462                            |
| TRBV6-8                    | P                    | 14836310-14836739                            |
| TRBV5-11                   | P                    | 14833988-14834459                            |
| TRBV6-9                    | P                    | 14831500-14832129                            |
| TRBV5-12                   | F                    | 14829163-14829639                            |
| TRBV6-10                   | P                    | 14827490-14827937                            |
| TRBV5-13                   | P                    | 14825745-14826215                            |
| TRBV6-11                   | F                    | 14823870-14824298                            |
| TRBV5-14                   | F                    | 14821654-14822111                            |
| TRBV6-12                   | P                    | 14817035-14817458                            |
| TRBV5-15                   | P                    | 14814687-14815165                            |
| TRBV6-13                   | P                    | 14812871-14813299                            |
| TRBV5-16                   | F                    | 14810546-14811023                            |
| TRBV6-14                   | P                    | 14808147-14808573                            |
| TRBV5-17                   | F                    | 14805577-14806053                            |
| TRBV6-15                   | P                    | 14803917-14804352                            |
| TRBV5-18                   | F                    | 14801694-14802151                            |
| TRBV6-16                   | F                    | 14799888-14800318                            |
| TRBV6-17                   | ORF                  | 14796555-14796986                            |
| TRBV5-19                   | F                    | 14793458-14793932                            |
| TRBV6-18                   | F                    | 14791344-14791772                            |
| TRBV6-19                   | F                    | 14788164-14788593                            |
| TRBV5-20                   | P                    | 14786407-14786878                            |
| TRBV6-20                   | ORF                  | 14784505-14784933                            |
| TRBV5-21                   | F                    | 14782273-14782730                            |
| TRBV6-21                   | ORF                  | 14777737-14778160                            |
| TRBV5-22                   | F                    | 14775382-14775860                            |
| TRBV6-22                   | P                    | 14773555-14773985                            |

|          |     |                   |
|----------|-----|-------------------|
| TRBV5-23 | P   | 14771163-14771727 |
| TRBV6-23 | ORF | 14768372-14768802 |
| TRBV6-24 | P   | 14765013-14765442 |
| TRBV5-24 | F   | 14762789-14763246 |
| TRBV6-25 | P   | 14754413-14754840 |
| TRBV5-25 | P   | 14752079-14752554 |
| TRBV6-26 | F   | 14750394-14750821 |
| TRBV5-26 | P   | 14748092-14748563 |
| TRBV6-27 | F   | 14745817-14746247 |
| TRBV5-27 | F   | 14743611-14744069 |
| TRBV5-28 | P   | 14736819-14737282 |
| TRBV6-28 | F   | 14734992-14735419 |
| TRBV5-29 | F   | 14732653-14733130 |
| TRBV6-29 | F   | 14729739-14730168 |
| TRBV7-1  | F   | 14726886-14727332 |
| TRBV8    | P   | 14722863-14723353 |
| TRBV5-30 | F   | 14714773-14715240 |
| TRBV7-2  | F   | 14709813-14710296 |
| TRBV9    | P   | 14704699-14704981 |
| TRBV10   | P   | 14698951-14699383 |
| TRBV11   | P   | 14694487-14694943 |
| TRBV12-1 | F   | 14687500-14687943 |
| TRBV12-2 | F   | 14672039-14672481 |
| TRBV14   | P   | 14669550-14669978 |
| TRBV15   | F   | 14667225-14667689 |
| TRBV16   | F   | 14662154-14662607 |
| TRBV18   | P   | 14648592-14649224 |
| TRBV19   | F   | 14646735-14647211 |
| TRBV20   | F   | 14641339-14642152 |
| TRBV21-1 | F   | 14634677-14635133 |
| TRBV21-2 | F   | 14629352-14629795 |
| TRBV21-3 | F   | 14620320-14620770 |
| TRBV21-4 | F   | 14615849-14616310 |
| TRBV21-5 | F   | 14611937-14612387 |
| TRBV21-6 | F   | 14605623-14606081 |
| TRBV22   | F   | 14601178-14601645 |
| TRBV24   | F   | 14595644-14596117 |
| TRBV25   | F   | 14589280-14589750 |
| TRBV26   | F   | 14587349-14587828 |
| TRBV27   | P   | 14575967-14576435 |
| TRBV28   | F   | 14569871-14570543 |
| TRBV29   | F   | 14562392-14562986 |
| TRBD1    | F   | 14543107-14543120 |
| TRBJ1-1  | F   | 14542403-14542448 |
| TRBJ1-2  | F   | 14542272-14542315 |
| TRBJ1-3  | ORF | 14541977-14542024 |
| TRBJ1-4  | F   | 14541399-14541447 |
| TRBJ1-5  | F   | 14541123-14541172 |
| TRBJ1-6  | F   | 14540328-14540380 |
| TRBC1    | F   | 14535962-14537639 |
| TRBD3    | F   | 14533308-14533321 |
| TRBJ3-1  | F   | 14532614-14532663 |
| TRBJ3-2  | F   | 14532463-14532513 |
| TRBJ3-3  | F   | 14532247-14532295 |

|         |                    |                   |
|---------|--------------------|-------------------|
| TRBJ3-4 | F                  | 14532130-14532177 |
| TRBJ3-6 | P                  | 14532042-14532094 |
| TRBJ3-5 | F                  | 14531825-14531871 |
| TRBC3   | F                  | 14526671-14528093 |
| TRBD2   | F                  | 14523578-14523593 |
| TRBJ2-1 | F                  | 14522522-14522571 |
| TRBJ2-2 | F                  | 14522325-14522375 |
| TRBJ2-3 | F                  | 14522107-14522155 |
| TRBJ2-4 | F                  | 14521960-14522008 |
| TRBJ2-5 | F                  | 14521843-14521888 |
| TRBJ2-6 | F                  | 14521740-14521792 |
| TRBJ2-7 | ORF/F <sup>c</sup> | 14521509-14521554 |
| TRBC2   | F                  | 14517246-14518875 |
| TRBV30  | F                  | 14503203-14503862 |

<sup>a</sup> L-PART1/ V-exon for TRBV genes

<sup>b</sup> STOP-CODON at position 108 (last 3' codon of germline CDR3-IMGT) may disappear during rearrangements

<sup>c</sup> J-GENE functional is referred to TRBJ2-7 detected within cDNAs