How many TRD genes?

Chromosome 14 C1

The total number of T cell receptor delta TRD genes per haploid genome in *Mus musculus* laboratory mice is 11 (21 including 10 upstream TRAV/DV).

The mouse (Mus musculus) TRD locus is located on chromosome 14 C1 at 19.7 cM.

The mouse TRD spans 275 kb, nestled in the TRA locus. It comprises 6 TRDV (16 including 10 upstream TRAV/DV), 2 TRDD, 2 TRDJ, 1 TRDC. One TRDV is in inverted orientation in 3' of TRDC.

IMGT tools to analyse expressed variable genes

**IMGT/V-QUEST**

**IMGT/JunctionAnalysis**

Analysis of the TRDV genes (germline or rearranged) can be performed by IMGT/V-QUEST and analysis of the V-D-J junctions by IMGT/JunctionAnalysis.

How are TRD genes organized?

**TRD locus**

Locus representation: Mouse (Mus musculus) TRA on chromosome 14 C1

**Potential repertoire**

The potential TRD repertoire per haploid genome comprises 10 functional genes (19-20 with the TRAV/DV): 5 TRDV (14-15 with the TRAV/DV), 2 TRDD, 2 TRDJ and 1 TRDC.

IMGT/3Dstructure-DB

**IMGT/Collier de perles tool**

The definitive IMGT nomenclature of the mouse TRDV genes and the correspondence with the provisional nomenclature have been established.

**Towards 3D structures**

There is no known three-dimensional structure of V-DELTA domains or TR-DELTA chain, but IMGT Colliers de Perles can be constructed with the tool available at the IMGT/3Dstructure-DB home page.

IMGT overview: the mouse T cell receptor delta TRD genes

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