# Article information:

Structural basis of assembly of the human T cell receptor–CD3 complex | Nature
<https://www.nature.com/articles/s41586-019-1537-0>

# Article summary:

1. The structure of the human T cell receptor-CD3 complex has been determined using cryo-electron microscopy at 3.7 Å resolution.

2. The octameric TCR-CD3 complex is assembled with 1:1:1:1 stoichiometry of TCRαβ:CD3γε:CD3δε:CD3ζζ.

3. Assembly of the extracellular domains of TCR-CD3 is mediated by the constant domains and connecting peptides of TCRαβ that pack against CD3γε–CD3δε, forming a trimer-like structure proximal to the plasma membrane.

# Article rating:

Appears well balanced: The article presents the information in a reliable and balanced way, without biases and prejudices. The claims made in the article are well supported and, where applicable, all sides of the argument are given opportunity to present their point of view. The article appears trustworthy and reliable.

# Article analysis:

The article provides a detailed description of the structural basis for assembly of the human T cell receptor–CD3 complex, as determined by cryo-electron microscopy at 3.7 Å resolution. The authors provide evidence for their claims in the form of diagrams and figures, which are supported by references to other studies in the field. The article does not appear to be biased or one-sided, as it presents both sides equally and does not make any unsupported claims or omit any points of consideration. Furthermore, there are no promotional elements present in the article, nor does it appear to be partial in any way. The article also notes potential risks associated with its findings, such as potential implications for immunotherapies targeting the complex. In conclusion, this article appears to be reliable and trustworthy due to its thoroughness and lack of bias or partiality.

# Topics for further research:

* T cell receptor structure
* CD3 complex structure
* Cryo-electron microscopy
* Immunotherapy targeting TCR-CD3
* T cell receptor-CD3 interactions
* Structural basis of TCR-CD3 assembly

# Report location:

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