

# Cluster designation

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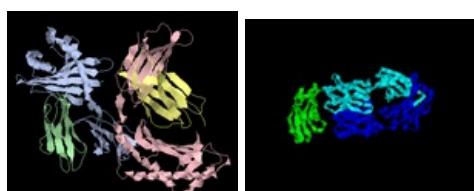
This article has been translated from WikiSkripta; ready for the **editor's review**.

Template:Heslo **Cluster designation** (sometimes also referred to as a cluster of differentiation) is the nomenclature hybridomas, which produce highly specific antibodies against certain proteins, immunoglobulin. These proteins and glycoproteins are most commonly found on leukocytes, but also on endothelium and other cells. These are *transmembrane* proteins. They are called (not quite correctly, but commonly) as **CD characters**, the cells that carry them then **CD-n positive** (eg **CD-8<sup>+</sup>** ).

## Function

The proteins that make up the antigen for a CD antibody have a very wide range of effects and functions. These include "adhesion" molecules, components of T-lymphocytes and B-lymphocytes receptors, and many others.

## Diagnostic meaning



Some CD characters are so specific to each cell type that they can be used

very well to accurately search for and label cells. An overview of the most important CD characters and the types of cells that carry them:

<b>CD-2</b>	immature T-lymphocytes
<b>CD-3</b>	all T-lymphocytes (part of 'TcR'), except NK cells
<b>CD-4</b>	Helper T-ly
<b>CD-7</b>	T-ly located in thymu
<b>CD-8</b>	cytotoxic T-ly
<b>CD-14</b>	monocytes and macrophages
<b>CD-15</b>	neutrophil y, eosinophilic granulocytes
<b>CD-16</b>	NK cells, neutrophils
<b>CD-19</b>	B-lymphocyte y
<b>CD-34</b>	lymphoid and myeloid progenitor cells
<b>CD-38</b>	plasma cells
<b>CD-40</b>	B-ly (isotype rearrangement in the presence of CD-40 ligand)
<b>CD-45</b>	pan-lymphocyte antigen
<b>CD-56</b>	NK cells
<b>CD-58</b>	endothelium, T-cell antigen presenting cells (CD-2 adhesion)
<b>CD-64</b>	'Fc <sub>y</sub> receptor' (macrophages, neutrophils)
<b>CD-68</b>	dendritic cells
<b>CD-80 and 86</b>	antigen presenting cells to T cells
<b>CD-203</b>	basophilic granulocytes
	- <b>CD-95</b> FAS receptor

## Leukemia

Upon closer diagnosis of "leukemia", CD markers that express malignant leukocytes are monitored. This makes it possible to find out quite precisely which line and at what stage of maturation it is.

🔍 For more information see [Leukemia](#).

## Links

## Related Articles

- T-lymphocytes
- B-lymphocytes
- Non-specific immunity
- Specific immunity

## External links

- **HLDA - CD databáze** (<http://www99.mh-hannover.de/aktuelles/projekte/hlda7/hldatabase/cdindex.htm>)

## Used literature

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