## Open Peer Review on Qeios

## Talacotuzumab

National Cancer Institute

## Source

National Cancer Institute. <u>Talacotuzumab</u>. NCI Thesaurus. Code C102784.

A humanized IgG1 monoclonal antibody against CD123 (Interleukin-3 receptor alpha chain or IL3RA) with potential antineoplastic activity. Upon intravenous administration, talacotuzumab binds to and neutralizes CD123. This may inhibit IL-3-dependent signaling and may inhibit proliferation and differentiation in CD123-positive tumor cells. CSL362 contains an engineered Fc region which increases its binding affinity to Fc-gamma receptors on the surface of natural killer (NK) cells thereby initiating antibody-dependent cellular cytotoxicity (ADCC). CD123 is normally expressed on committed blood progenitor cells in the bone marrow; its overexpression is associated with increased leukemic cell proliferation and aggressiveness.