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# Anti-CD123/CD3 Bispecific Antibody JNJ-63709178

National Cancer Institute

## Source

National Cancer Institute. *Anti-CD123/CD3 Bispecific Antibody JNJ-63709178*. NCI Thesaurus. Code C128486.

A humanized anti-CD123/anti-CD3 bispecific monoclonal antibody, with potential immunostimulating and antineoplastic activities. Anti-CD123/CD3 bispecific antibody JNJ-63709178 possesses two antigen-recognition and binding sites, one for the CD3 complex, a group of T-cell surface glycoproteins that complex with the T-cell receptor (TCR), and one for CD123, a tumor-associated antigen (TAA) overexpressed on the surface of certain tumor cells. Upon administration of JNJ-63709178, this bispecific antibody simultaneously binds to both CD3-expressing T-cells and CD123-expressing cancer cells, thereby crosslinking CD123-expressing tumor cells and cytotoxic T-lymphocytes (CTLs). This may result in potent CTL-mediated cell lysis of CD123-expressing tumor cells. CD123, the interleukin-3 receptor alpha chain, is overexpressed in a variety of cancers; its expression is low or absent in normal, healthy cells.