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Astatine At 211 Anti-CD45 Monoclonal Antibody BC8-B10

National Cancer Institute

Source

National Cancer Institute. *Astatine At 211 Anti-CD45 Monoclonal Antibody BC8-B10*. NCI Thesaurus. Code C133190.

A radioimmunoconjugate containing the murine IgG1 anti-CD45 monoclonal antibody (MAb) BC8 where the lysine side groups have been conjugated with decaborate (closo-decaborate; B10) and labeled with astatine (At) 211, with potential immunotherapeutic activity. Astatine At 211 anti-CD45 monoclonal antibody BC8-B10 binds to CD45 antigen, a receptor protein-tyrosine phosphatase expressed on the surface of both normal and malignant hematopoietic cells. After binding and internalization by CD45-expressing tumor cells, this agent may deliver a cytotoxic dose of alpha radiation. Additionally, the radiolabel can be leveraged to assay the biodistribution and/or pharmacokinetics (absorption, distribution, metabolism and excretion) for this agent. The use of B10 rather than other labeling methods increases the therapeutic efficacy while decreasing the toxicity of the radioconjugate.