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Zirconium Zr 89-labeled Anti-CA19-9 Monoclonal Antibody 5B1

National Cancer Institute

Source

National Cancer Institute. *Zirconium Zr 89-labeled Anti-CA19-9 Monoclonal Antibody 5B1*. NCI Thesaurus. Code C126332.

A radioimmunoconjugate comprised of the recombinant human monoclonal antibody against the carbohydrate antigen sialyl-Lewis a (carbohydrate antigen 19-9; CA19-9) conjugated to the chelator desferrioxamine (DFO) and labeled with the radioisotope zirconium Zr 89 (Zr 89), with radioisotopic activity and potential use as an imaging agent in positron emission tomography (PET). The antibody moiety of zirconium Zr 89 anti-CA19-9 monoclonal antibody 5B1 targets and binds to CA19-9 expressing-tumor cells. Upon binding, internalization and proteolysis, the radioisotope moiety may be detected using PET, thus allowing imaging and quantification of CA19-9-expressing tumor cells. CA19-9, overexpressed on a number of different tumor cell types, plays a key role in tumor cell survival and metastasis.