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Zirconium Zr 89 Desferrioxamine B Monoclonal Antibody huJ591

National Cancer Institute

Source

National Cancer Institute. *Zirconium Zr 89 Desferrioxamine B Monoclonal Antibody huJ591*. NCI Thesaurus. Code C101133.

A radioimmunoconjugate comprised of the recombinant humanized monoclonal antibody J591 against prostate-specific membrane antigen (PSMA) conjugated to chelator desferrioxamine B (DFO-B) and labeled with the radioisotope zirconium Zr 89 with potential imaging property used in positron emission tomography (PET) imaging. Upon administration of zirconium Zr 89 desferrioxamine B monoclonal antibody huJ591, the antibody moiety binds to the extracellular domain of PSMA, and the radioisotope moiety may be detected using PET, thereby allowing the imaging and quantification of PSMA-expressing tumor cells. PSMA, or folate hydrolase, is a cell surface peptidase highly expressed by malignant prostate epithelial cells and vascular endothelial cells of numerous solid tumor malignancies. In addition, upon PET imaging this agent provides high tumor:background tissue ratios.