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Copper Cu 64 Anti-CEA Monoclonal Antibody M5A

National Cancer Institute

Source

National Cancer Institute. *Copper Cu 64 Anti-CEA Monoclonal Antibody M5A*. NCI Thesaurus. Code C118454.

A radioimmunoconjugate consisting of a humanized monoclonal antibody directed against the human carcinoembryonic antigen, carcinoembryonic antigen-related cell adhesion molecule 5 (CEA or CEACAM5), which is conjugated with the radioisotope copper Cu 64 via the chelator tetra-azacyclododecanetetra-acetic acid (DOTA), with potential use as an imaging agent during positron emission tomography (PET). Upon administration, the antibody moiety of copper Cu 64 anti-CEA monoclonal antibody M5A specifically binds to cells expressing CEA. Upon binding, the radioisotope moiety can be detected using PET, thereby allowing the imaging and quantification of CEA-expressing tumor cells. CEA, a tumor associated antigen and a member of the CEA family of proteins, plays a key role in cell migration, cell invasion, and cell adhesion and is overexpressed by a variety of cancer types.