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Zirconium Zr 89-labeled Anti-PlGF Monoclonal Antibody RO5323441

National Cancer Institute

Source

National Cancer Institute. *Zirconium Zr 89-labeled Anti-PlGF Monoclonal Antibody RO5323441*. NCI Thesaurus. Code C102750.

A radioimmunoconjugate comprised of the humanized IgG1 monoclonal antibody directed against placental growth factor (PlGF) and labeled with zirconium Zr 89 (Zr 89), with potential radiotracer activity upon positron emission tomography (PET) imaging. The monoclonal antibody moiety of RO5323441 binds to both PlGF-1 and -2, thereby preventing the binding of PlGF-1 and -2 to the vascular endothelial growth factor receptor-1 (VEGFR-1) and the subsequent activation of VEGFR-1. The radioisotope moiety of RO5323441 may be detected using PET, thereby allowing for visualization of the antibody's distribution and PlGF expression. PlGF, a member of the VEGF sub-family and a key molecule in angiogenesis and vasculogenesis, is upregulated in many cancers.