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# 2-Fluoropropionyl-labeled Pegylated Dimeric RGD Peptide

National Cancer Institute

## Source

National Cancer Institute. *2-Fluoropropionyl-labeled Pegylated Dimeric RGD Peptide*. NCI Thesaurus. Code C97336.

A radiopharmaceutical agent comprised of a pegylated dimeric arginine-glycine-aspartic acid (RGD)-based peptide labeled with 2-fluoropropionyl, with potential alphaVbeta3 integrin imaging activity upon positron emission topography (PET). The RGD moiety of 2-fluoropropionyl-labeled pegylated dimeric RGD peptide targets and binds to alphaVbeta3 integrin. Upon PET imaging, alphaVbeta3 integrin-expressing tumor cells can be visualized and expression levels can be quantified. Compared to other fluorine F 18 labeled RGD-containing peptides, this agent shows increased affinity to alphaVbeta3 integrin, enhanced tumor uptake as well as improved pharmacokinetics. alphaVbeta3 integrin, overexpressed on certain tumor cells and tumor endothelial cells, plays a key role in angiogenesis, tumor proliferation and survival.