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Fluorine F 18-labeled 2-FACPC

National Cancer Institute

Source

National Cancer Institute. *Fluorine F 18-labeled 2-FACPC*. NCI Thesaurus. Code C120070.

A radioconjugate composed of an analog of the synthetic, alicyclic amino acid aminocyclopentane carboxylic acid (ACPC) radiolabeled with the positron-emitting isotope fluorine F 18 (2-[18F]FACPC), with potential cancer cell imaging activity during positron emission tomography (PET). As tumor cells have a higher rate of protein synthesis than normal, healthy cells, upon administration, fluorine F 18 labeled 2-FACPC is selectively taken up by rapidly proliferating tumor cells through the sodium-independent subtype L amino acid transport system (AAT) which leads to the accumulation of this tracer in tumor cells. Upon PET, tumor cells can then be visualized.