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Fluorine F 18 d-FMAU

National Cancer Institute

Source

National Cancer Institute. *Fluorine F 18 d-FMAU*. NCI Thesaurus. Code C103278.

A radioconjugate comprised of the synthetic pyrimidine analogue 1-(2'-deoxy-2'-fluoro-beta-D-arabinofuranosyl)thymine (d-FMAU) labeled with the radioisotope fluorine F 18 (18F-d-FMAU), that can potentially be used as an imaging agent upon positron emission tomography (PET). Upon administration, fluorine F 18 FMAU is distributed and taken up by cells based on the rate of the cell's DNA synthesis. Upon PET imaging, cell proliferation in tumors can be assessed as tumor cells have a higher rate of DNA synthesis than normal, healthy cells. This agent is not catabolized and has a long half-life compared to the radioconjugate carbon C 11 thymidine.