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Fluorine F 18 4-L-fluoroglutamine (2S,4R)

National Cancer Institute

Source

National Cancer Institute. *Fluorine F 18 4-L-fluoroglutamine (2S,4R)*. NCI Thesaurus. Code C103196.

A radioconjugate and glutamine analog consisting of the fluorine F 18 labeled 2S, 4R stereoisomer of 4-fluoroglutamine with potential use as a metabolic tracer for tumor imaging. Upon intravenous administration, fluorine F 18 4-L-fluoroglutamine (2S,4R) is preferentially taken up by cancer cells, possibly driven by c-Myc upregulation. Upon positron emission tomography (PET), cancer cells can be imaged. Tumor cells use the amino acid glutamine for nutritional purposes necessary for energy production and growth; as tumor cells proliferate more rapidly than normal healthy cells, glutamine uptake is higher in certain cancer cells.