

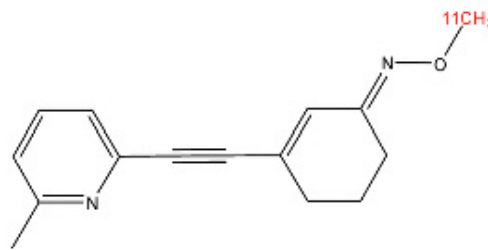
TYPE

DIAGRAM

DESCRIPTION

[¹¹C]ABP688

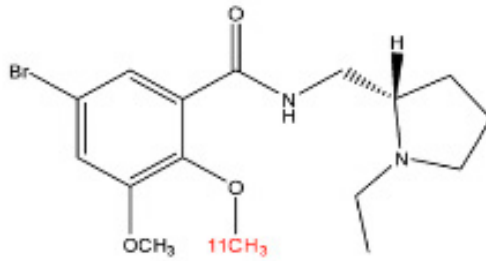
3-(6-methyl-pyridin-2-ylethynyl)-cyclohex-2-enone-O-¹¹C-methyl-oxime



Highly selective antagonist tracer for imaging the metabotropic glutamate receptor subtype 5 (mGluR5)

[¹¹C]FLB 457

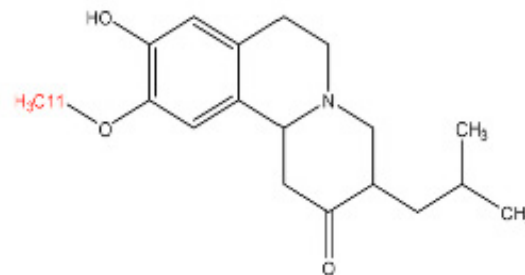
(S)-N-(1-Ethyl-2-pyrrolidinyl methyl)-5-bromo-2-[¹¹C]methoxy-3-methoxybenzamide



For imaging D2 dopamine receptors in extrastriatal brain regions

[¹¹C]DTBZ

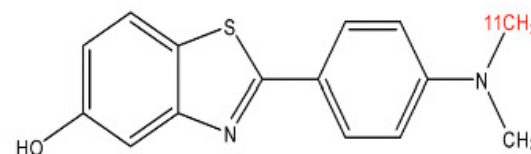
Dihydrotrabenzazine



High-affinity ligand of the vesicular monoamine transporter (VMAT2)

[¹¹C]PIB

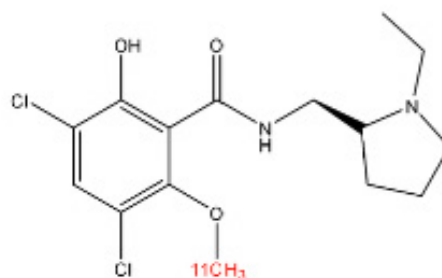
N-methyl-[¹¹C]2-(4-methyl-aminophenyl)-6-hydroxybenzo-thiazole



beta-Amyloid binding agent for imaging amyloid plaques

[¹¹C]Raclopride

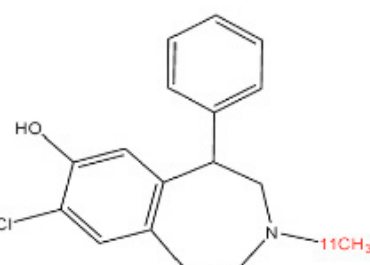
3,5-dichloro-N-[(2S)-1-ethylpyrrolidin-2-yl]methyl]-2-hydroxy-6-(¹¹C)methoxybenzamide



Dopamine D2 receptor antagonist

[¹¹C]SCH 23390

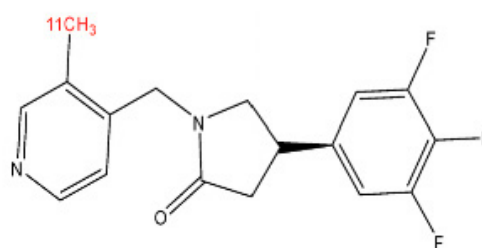
7-chloro-3-methyl-1-phenyl-1,2,4,5-tetrahydro-3-benzazepin-8-ol



Dopamine D1 receptor antagonist

[¹¹C]UCB-J

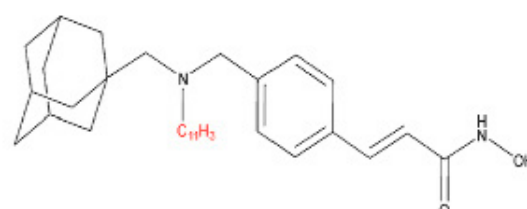
(R)-1-((3-((¹¹C)methyl-(¹¹C)pyridin-4-yl)methyl)-4-(3,4,5-trifluorophenyl)pyrrolidin-2-one



Imaging the synaptic vesicle glycoprotein 2A (SV2A) in the human brain.

[¹¹C] Martinostat

(2E)-3-(4-{(Adamantan-1-yl-methyl)(methyl)amino}methyl}phenyl)-N-hydroxyacrylamid



Selective binding to I/IIb HDAC enzymes. For use in Dementia and Addiction research.

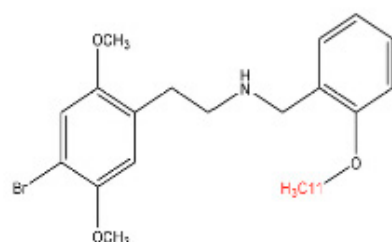
TYPE

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DESCRIPTION

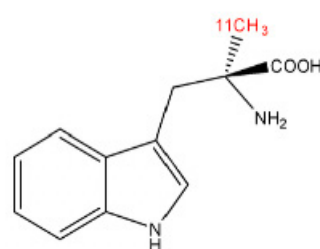
[¹¹C]CIMBI36

2-(4-Bromo-2,5-dimethoxyphenyl)-N-(2-[¹¹C]methoxybenzyl)ethanamine



Serotonin 2A (5-HT_{2A}) receptor agonist PET radioligands. Addiction research.

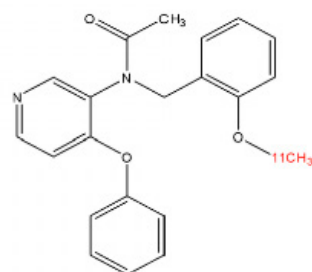
[¹¹C]alpha-Methyl-L-Tryptophan



For serotonin synthesis

[¹¹C]PBR28

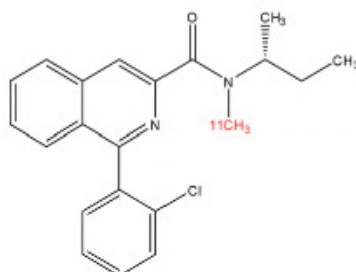
Acetamide, N-((2-(methoxy-¹¹C)-phenyl)methyl)-N-(6-phenoxy-3-pyridinyl)-



Ligand of the mitochondrial Translocator Protein (TSPO; formerly designated as the peripheral benzodiazepine receptor), found in activated microglia (inflammation marker). Shows less non-specific binding than ¹¹C-PK 11195.

[¹¹C]PK 11195

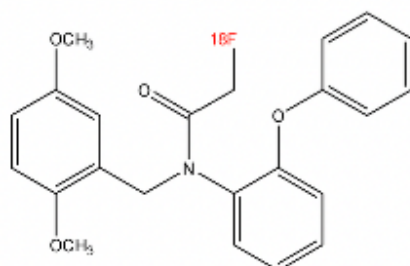
(R)-N-[¹¹C]methyl-N-(1-methylpropyl)-1-(2-chlorophenyl)-isoquinoline-3-carboxamide



Ligand of the mitochondrial Translocator Protein (TSPO), found in activated microglia (inflammation marker)

[¹⁸F]PBR06

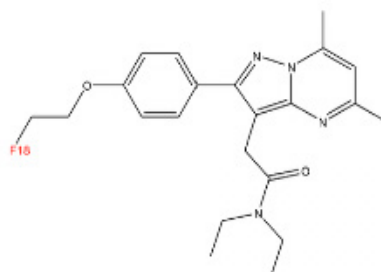
[¹⁸F]N-fluoroacetyl-N-(2,5-dimethoxybenzyl)-2-phenoxyaniline



Also a ligand of the mitochondrial Translocator Protein (TSPO), found in activated microglia (inflammation marker). Shows less non-specific binding than ¹¹C-PK 11195, and is labeled with ¹⁸F, allowing for more widespread distribution.

[¹⁸F]DPA714

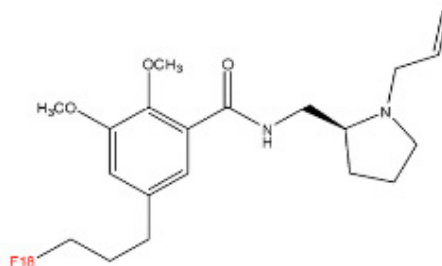
N,N-diethyl-2-(2-(4-(2-¹⁸F-fluoroethoxy)phenyl)-5,7-dimethylpyrazolo[1,5-a]pyrimidin-3-yl)



For imaging TSPO. A biomarker of the new generation for Neuroinflammation.

[¹⁸F]Fallypride

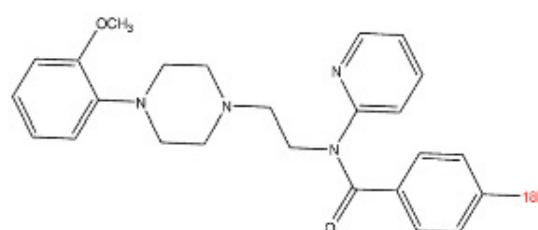
(S)-N-(1-allyl-2-pyrrolidinyl)methyl-5-(3-[¹⁸F]fluoropropyl)-2,3-dimethoxybenzamide



Dopamine D₂ receptor antagonist with high affinity, allowing cortical D_{2r} visualisation

[¹⁸F]MPPF

4-[¹⁸F]Fluoro-N-[2-[4-(2-methoxyphenyl)-1-piperazinyl]ethyl]-N-(2-pyridyl)benzamide



Ligand of the serotonin receptor 5-HT_{1A}; agonist

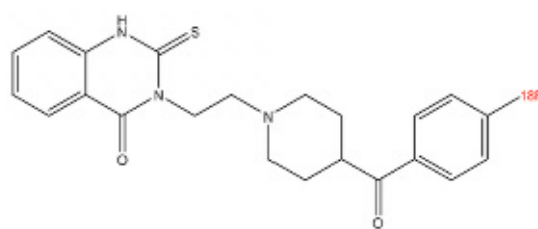
TYPE

DIAGRAM

DESCRIPTION

[¹⁸F]Altanserin

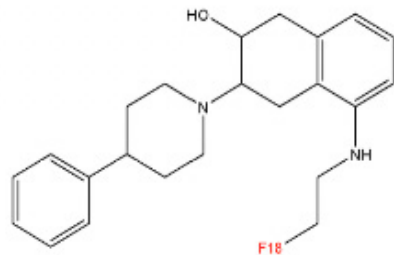
3-[2-[4-(4--(¹⁸F)Fluorobenzoyl)-1-piperidiny]ethyl]-2,3-dihydro-2-thioxo-4(1H)-quinazolin-4-



Ligand of the serotonin receptor 5-HT2A; agonist

[¹⁸F]Benzovesamicol

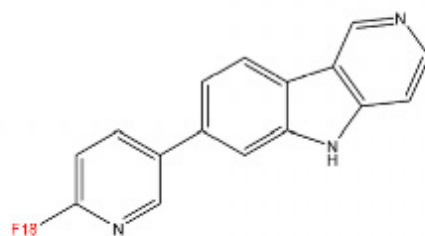
(-)-(2R,3R)-trans-2-hydroxy-3-(4-phenylpiperidino)-5-(2-[¹⁸F]fluoroethoxy)-1,2,3,4-tetralin



Radioligand of the vesicular acetylcholine transporter (VACHT). Still investigational (used in only models at this time)

[¹⁸F]T807

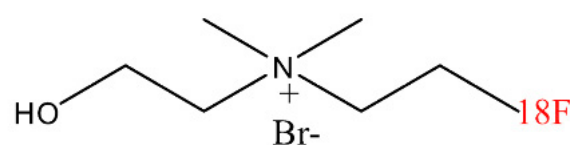
7-(6-(¹⁸F)fluoranylpyridin-3-yl)-5H-pyrido[4,3-b]indole



PET imaging agent for Tau

[¹⁸F]FECh

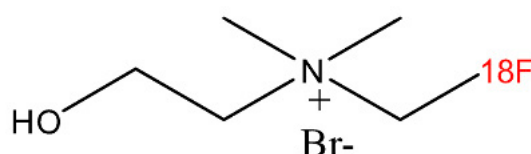
2-[(¹⁸F)Fluoroethyl]-choline ([(¹⁸F)FECh])



A tracer for the detection of prostate cancer

¹⁸F-FMCh

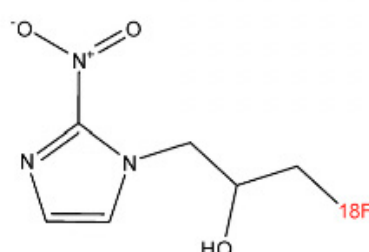
[¹⁸F]Fluoromethyl-[1,2-²H₄]-choline



A novel radiotracer for imaging choline metabolism in tumors

[¹⁸F]FMISO

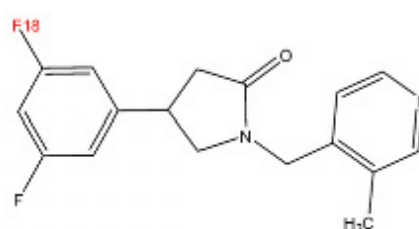
H-1-(3-[¹⁸F]fluoro-2-hydroxypropyl)-2-nitroimidazole



Fluoromisonidazole for the detection of hypoxia

[¹⁸F]SDM-8

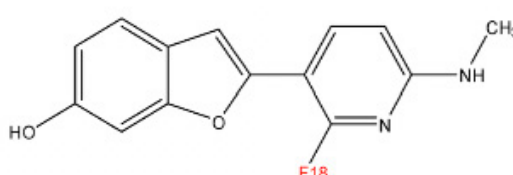
4-(3,5-Difluorophenyl)-1-((3-methylpyridin-4-yl)methyl)pyrrolidine-2-one



F-18 tracer (version) of [¹¹C]-UCB-J

[¹⁸F]NAV4694

2-[2-(¹⁸F)-fluoro-6-(methylamino)-3-pyridinyl]-1-benzofuran-5-ol



beta-Amyloid binding agent for imaging amyloid plaques

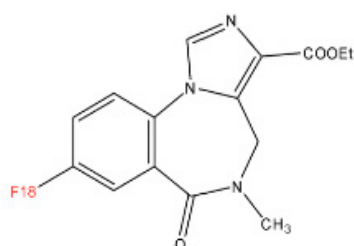
TYPE

DIAGRAM

DESCRIPTION

[¹⁸F]Flumazenil

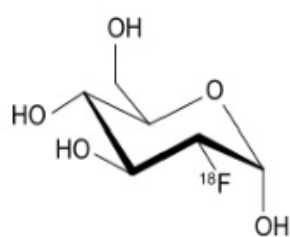
Ethyl 8-(¹⁸F)fluoranyl-5-methyl-6-oxo-4H-imidazo[1,5-a][1,4]benzodiazepine-3-carboxylate



Ligand of the benzodiazepine receptor (CBZR) found on gamma-aminobutyric acid (GABA-A) receptors

[¹⁸F]FDG

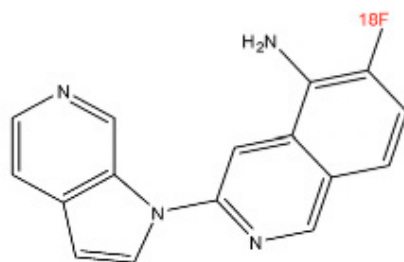
2-deoxy-2-[¹⁸F]fluoro-D-glucose)



Glucose analog

[¹⁸F]MK6240

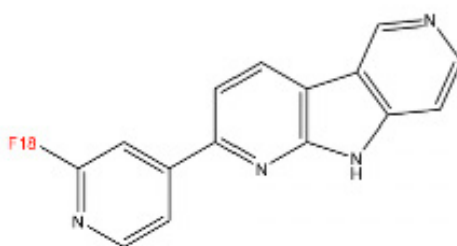
6-(Fluoro-(¹⁸F)-3-(1H-pyrrolo[2,3-c]pyridin-1-yl)isoquinolin-5-amine



2nd generation of tau tracers. Dementia research.

[¹⁸F]PI2620

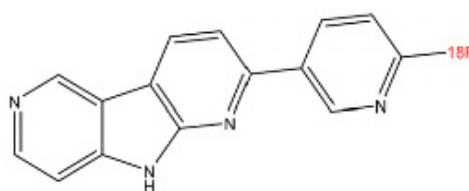
2-(2-([¹⁸F]fluoro)pyridin-4-yl)-9H-pyrrolo[2,3-b:4,5-c']dipyridine



2nd generation of tau tracers. Dementia research.

[¹⁸F]RO6958948

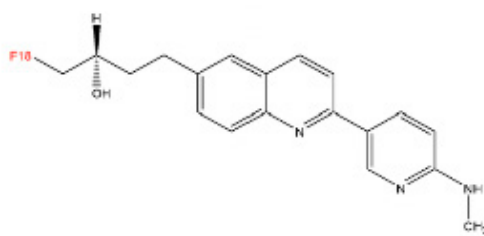
(2-(6-fluoro-pyridin-3-yl)-9H-dipyrido[2,3-b:3,4-d]pyrrole)



2nd generation of tau tracers. Dementia research.

[¹⁸F]THK5351

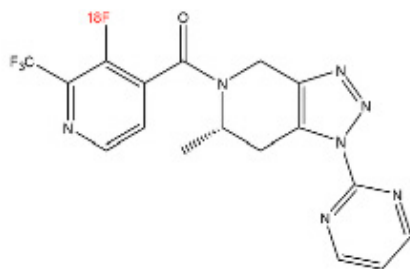
(2S)-1-(¹⁸F)fluoranyl-3-[2-[6-(methylamino)pyridin-3-yl]quinolin-6-yl]oxypropan-2-ol



2nd generation of tau tracers. Dementia research.

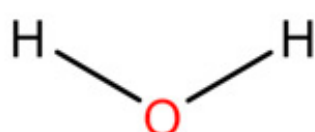
¹⁸F-JNJ-64413739

[3-[¹⁸F]fluoro-2-(trifluoromethyl)pyridin-4-yl][(6S)-6-methyl-1-(pyrimidin-2-yl)-1,4,6,7-tetrahydro-5H-[1,2,3]triazolo[4,5-c]pyridin-5-yl]methanon



PET ligand for the P2X7 ion channel

[¹⁵O]Water



[¹⁵O]water is used for measuring regional cerebral blood flow