

Materials List for:

¹⁸F-Labeling of Radiotracers Functionalized with a Silicon Fluoride Acceptor (SiFA) for Positron Emission Tomography

David Connolly^{*1}, Justin J. Bailey^{*1}, Melinda Wuest¹, Frank Wuest¹, Harun Ilhan^{2,3}, Peter Bartenstein^{2,3}, Carmen Wängler^{4,5}, Björn Wängler^{4,5}, Ralf Schirmmayer¹

¹Department of Oncology, University of Alberta

²Department of Nuclear Medicine, University Hospital of Munich

³ENETS Centre of Excellence, Interdisciplinary Center of Neuroendocrine Tumors of the GastroEnteroPancreatic System, LMU Munich

⁴Biomedical Chemistry, Department of Clinical Radiology and Nuclear Medicine, Medical Faculty Mannheim of Heidelberg University

⁵Molecular Imaging and Radiochemistry, Department of Clinical Radiology and Nuclear Medicine, Medical Faculty Mannheim of Heidelberg University

* These authors contributed equally

Correspondence to: Ralf Schirmmayer at shirma@ualberta.ca

URL: <https://www.jove.com/video/60623>

DOI: [doi:10.3791/60623](https://doi.org/10.3791/60623)

Materials

Name	Company	Catalog Number	Comments
[¹⁸ F]F ⁻ /H ₂ [¹⁸ O]O	(Cyclotron produced)	-	-
[2.2.2]Cryptand	Aldrich	291110	Kryptofix 2.2.2
Acetonitrile anhydrous	Aldrich	271004	-
Deionized water	Baxter	JF7623	-
Ethanol, anhydrous	Commercial Alcohols		-
Potassium carbonate	Aldrich	209619	-
QMA cartridge	Waters	186004540	QMA SepPak Light (46 mg) cartridge
Equipment			
C-18 cartridge	Waters	WAT023501	C-18 SepPak Light cartridge
C18 column	Phenomenex	00G-4041-N0	HPLC Luna C18 250 x 10 mm, 5 μm
HPLC	Agilent Technologies	-	HPLC 1200 series
micro-PET Scanner	Siemens	-	micro-PET R4 Scanner
Radio-TLC plate reader	Raytest	-	Radio-TLC Mini Gita
Sterile filter 0.22μm	Millipore	SLGP033RS	-