

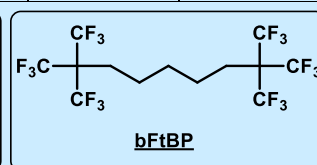
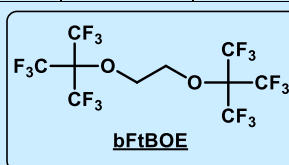
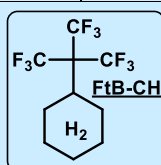
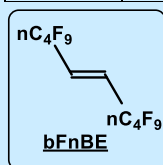
Pefluoro(tert-butanol) (CF₃)₃COH

Purity	97%
CAS Number	2378-02-1
Molecular Formula	C ₄ HF ₉ O
Molecular Weight	236.04

1. Bis(perfluorotert-butyl) ether type F-MRI with high sensitivity tracer was developed. Compared to conventional fluorine-based MRI tracers, it is easier to synthesize, has a shorter residence time in the body, and is less toxic to human fibroblasts, and is expected to be put to practical use. Both can be emulsified by ultrasonic waves.

F-MRI Tracer features;

	F15C5	L-PFPE	bFnBE	FtB-CH	bFtBOE	bFtBP
Half life	100day	100day	28day	7day	4.8day	4.4day
Contrast	High	High	High	Low	High	High
Notes	Perfluoro (15-crown-5)	Linear (perfluoro-polyether)	Oxidized during storage	-	Fibroblast Toxicity ND	Fibroblast Cytotoxic

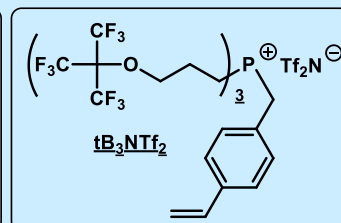
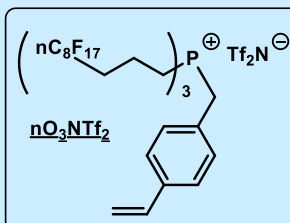
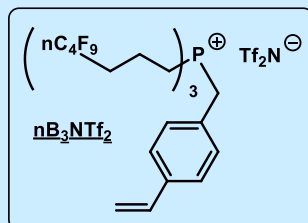


Application

ChemMedChem, 2023,18, e202300239

2. The photo-copolymer film from HDDA and perfluoro(tert-butoxy)propyl groups, which are Ponytail-type perfluoroalkyl groups, also with a styryl group bearing phosphonium salt; bis(trifluoromethyl)sulfonylimide anion, showed heat resistance and water repellency almost equivalent to that of perfluorooctyl-propyl group monomer, indicating its potential as a moisture-proof coating material for electronic circuits.

	nB2NTf2	nB3NTf2	nO3NTf2	tB3NTf2
DecTemp (°C)	367	371	374	389
Contact Angle	84	91	101	97



J. Poly. Sci., Part-A, Polym. Chem. 2013, 51, p2782-2792

Properties:

Appearance	Liquid-
Boiling point, °C	44-45

Capacity:	200kg/month-
-----------	--------------