

# Fluorocholine ( $^{18}\text{F}$ )



[ $^{18}\text{F}$ ]Fluorocholine is a positron-emitting radiopharmaceutical that is used for diagnostic purposes with positron emission tomography (PET) imaging. Choline phospholipids are important components of phospholipid cell membranes; hence, fast proliferating cells may express high choline uptake. This property has been utilized in several PET studies with [ $^{18}\text{F}$ ]Fluorocholine for the detection and differential diagnosis of prostate cancer, breast carcinoma, hyperparathyroidism and brain tumors.

## Product specifications

Fluorocholine ( $^{18}\text{F}$ )
225 MBq/ml at calibration time and date
Solution for injection
Store in the original package at room temperature
Expiry is 9:00 pm on delivery day
pH 4.5 – 7.5
Radiochemical purity $\geq$ 95%



✓ AVAILABILITY:  
Wednesday

✓ CALIBRATION:  
12:00 pm CET same day

✓ PACKAGING:  
15 ml multi-dose colorless glass vial – Type I

✓ ORDERING:  
Curium Pharma

## Physical Data

Rad. Type	Energy (keV)	Radiation Intensity (%)
B+	249.8	96.7
E-AU-K	0.52	3.07
G-AN	511	193

## Decay Table

Physical half-life: 109.77 min

Hours\min	0	10	20	30	40	50
0	1.000	0.939	0.881	0.827	0.777	0.729
1	0.685	0.643	0.603	0.567	0.532	0.499
2	0.469	0.440	0.413	0.388	0.364	0.342
3	0.321	0.301	0.283	0.266	0.249	0.234
4	0.220	0.206	0.194	0.182	0.171	0.160
5	0.150	0.141	0.133	0.125	0.117	0.110
6	0.103	0.097	0.091	0.085	0.080	0.075

To calculate a precalibration activity, divide the activity at calibration time by the decay factor.  
For a postcalibration activity, multiply the activity at calibration time by the decay factor.