RESULTS

Click radiolabeling of [18F]FLETT

Fully automated Click radiolabeling synthesis of [18F]FLETT, 2 has been successfully carried out using an iPHASE FlexLab module with comparable yield to the previously developed manual method (32.5%) and overall synthesis time reduced by 45 mins.

Radiolabeling and coupling of [18F]FBEM to glutathione

The synthesis and purification of [18F]FBEM, 1 have also been achieved in this fully automated synthesis module with radiochemical yield of 20%. The subsequent coupling to the sulphydryl group of glutathione was found to be quantitative with a radiochemical yield of 20%. The subsequent purification with HPLC 2 to give pure [18F]fluoroethyltriazolylthymidine analog ([18F]FLETT).