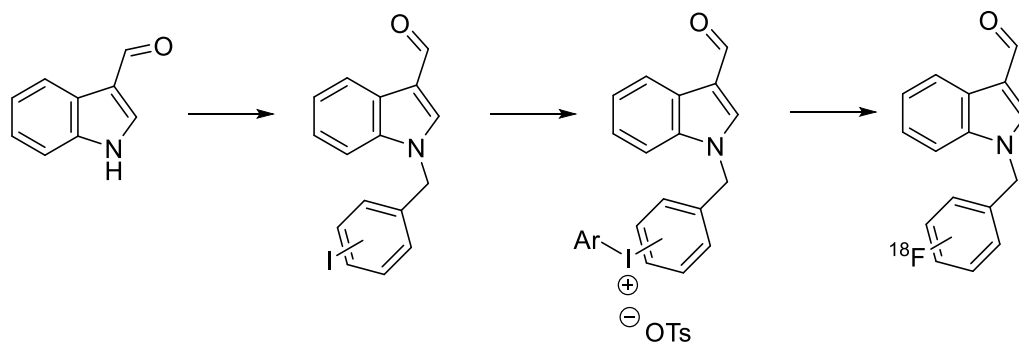
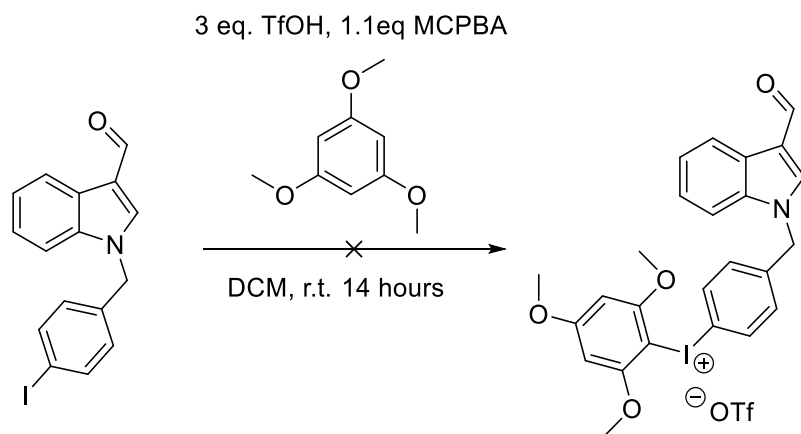


R = F, I, or Bpin substitution at *o*, *m*, or *p* position

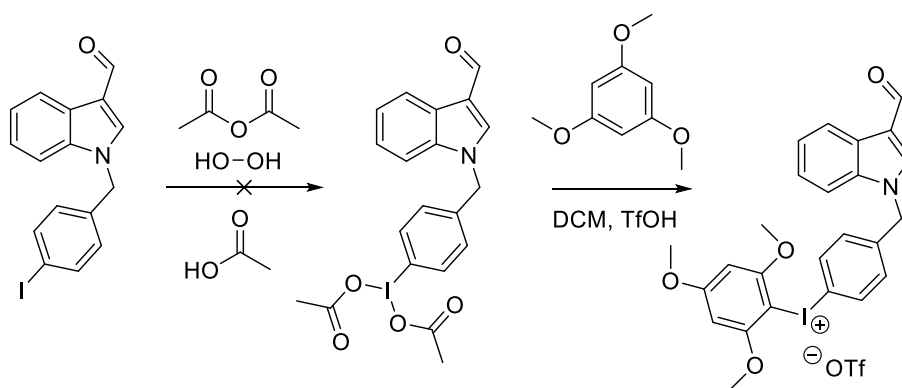
Scheme 1: Standard coupling conditions for indole-3-carbaldehyde and various benzyl bromides.



Scheme 2: Proposed synthetic route for idonium salt synthesis and subsequent labelling



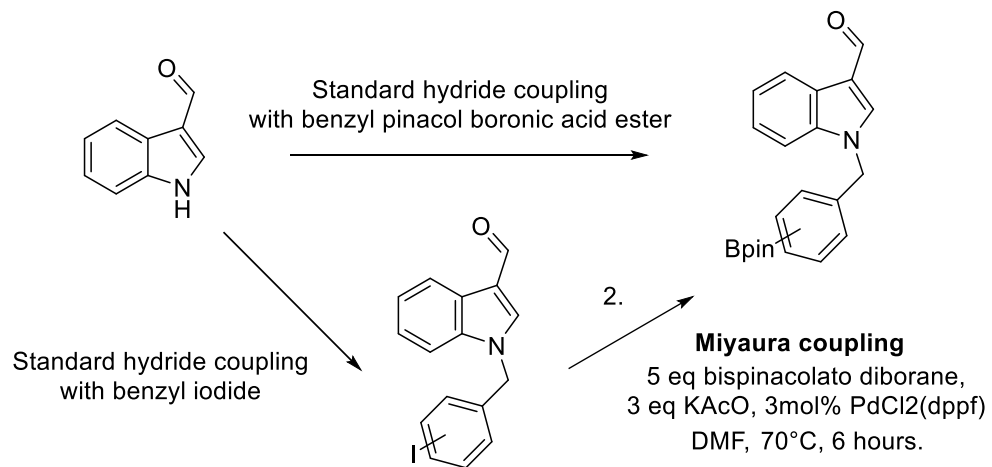
Scheme 3: Attempted initial iodonium salt synthesis



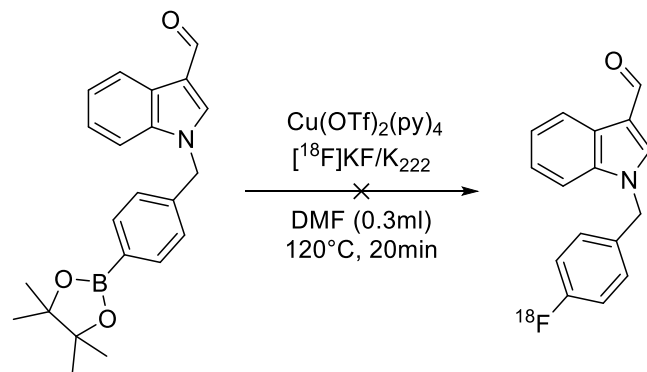
1) Formation of a
'diacetoxy-iodo' intermediate

2) Conversion to the desired
aryl-iodonium salt system

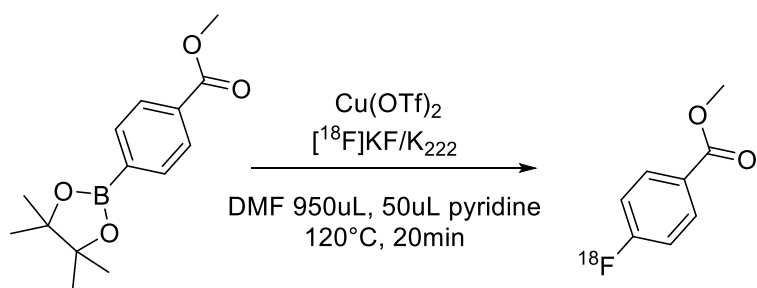
Scheme 4: A 2-step approach to iodonium salt synthesis.



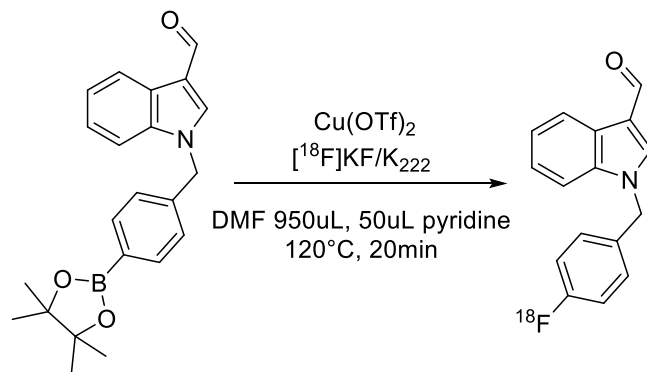
Scheme 5: Synthesis of boronic ester precursors via two routes



Scheme 6: Initial radiolabelling trial conditions utilizing Treadwell conditions.



Scheme 7: Radiolabelling conditions used for labelling of model system



Scheme 8: Radiolabelling conditions for KAM001