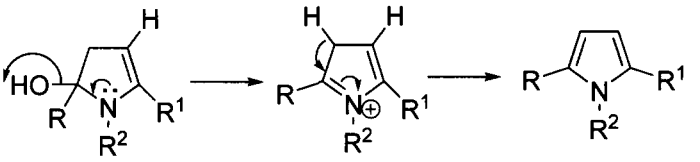
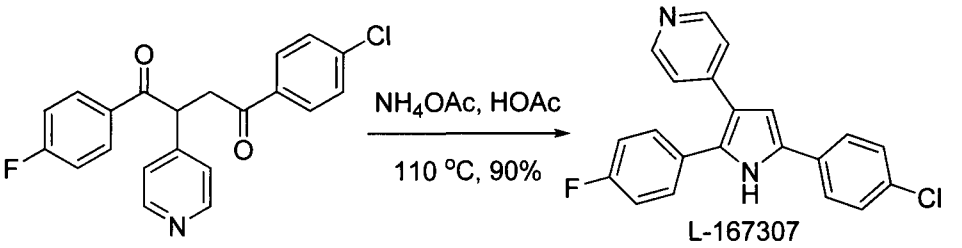


L-167307 is an orally bioavailable inhibitor of p38 kinase. *In vivo*, it reduces secondary paw swelling in the rat adjuvant arthritis model with an ID_{50} of 7.4 mg/kg/day. Triarylpyrrole L-167307 was assembled using the Paal–Knorr pyrrole synthesis of a 1,4-diketone and ammonium acetate.[29]



Celecoxib (Celebrex) is a selective cyclooxygenase-2 (COX-2) inhibitor prescribed as a nonsteroidal anti-inflammatory drug (NSAID). The Paal–Knorr cyclization was the crucial step in preparing tri-substituted keto-pyrroles as COX-2 inhibitors. Here, the tri-ketone substrates were prepared *in situ* from phenacyl bromide and 1,3-diketone.[30]