BMS-927711 is a CGRP antagonist with potential for the treatment of acute migraine without the mechanism-based cardiovascular risks associated with the current standard of care, the triptan class of drugs. A novel enantioselective synthesis of this molecule will be presented, amenable to large scale preparations. This streamlined synthesis showcases a chemo- and enantioselective reduction of a cyclohepta[b]pyridine-5,9-dione to set the initial stereocenter, then subsequent diastereoselective Pd-catalyzed alpha-arylation to form the key carbon-carbon bond. The final stereocenter is then set via a diastereoselective and atom economical reductive amination using ammonia gas and hydrogen. The resulting amino alcohol sets the stage for a chemoselective acylation of the secondary hydroxyl group to form the final API with no detected acylation on the unprotected nitrogen. A number of throughput limiting bottlenecks were encountered upon kilo scale execution of this route, each of which was overcome, culminating in a commercially viable process for this CGRP antagonist.