

# Synthesis of New 4-Aryl-1-(biarylmethylene)piperidines. Structural Analogs of Adoprazine (SLV313)

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A series of new 4-aryl-1-(biarylmethylene)piperidines have been synthesized. They are structurally related to SLV-313, a potential atypical antipsychotic agent with potent D<sub>2</sub> receptor antagonist and 5-HT<sub>1A</sub> receptor agonist properties. Suzuki-Miyaura reaction of cyclic vinyl boronates, derived from the vinyl triflates of *N*-protected tetrahydropyridines, with appropriate aryl halides yielded 4-aryl-piperidines. The reductive amination of the latter with suitable biarylaldehydes accomplished the synthesis of the new compounds.

*Key words:* Aryl-(biarylmethylene)piperidines, Suzuki-Miyaura Reaction, Reductive Amination, Schizophrenia