Since the occurrence of therapy resistant pathogens such as methicillin-resistant staphylococcus aureus (MRSA) permanently increases, research and development of novel pharmaceuticals are needed. Indole alkaloids often show biological activity and their structural motifs can be found in several drugs. The natural occurring N-heterocyclic bridged bisindol Alocasin A and its synthetic analogous show activity against methicillin-resistant staphylococcus aureus strains. Consequently, they are promising heterocyclic scaffolds in the development of novel drugs. The bisindols are synthesized via sequential palladium-catalyzed Masuda-borylation Suzuki-arylation sequence in a one-pot procedure. The mode of action of these compounds is still unclear. Via functionalization of the N-heterocyclic linker the derivatives should be employed in protein affinity chromatography to identify the target of the molecules and to elaborate structure-activity relationships.

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