

Public Abstract

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Department:Chemistry

Degree:PhD

Title:SYNTHESIS AND EVALUATION OF SIGMA RECEPTOR LIGANDS

Sigma receptors are unique binding sites located in the central nervous system (CNS) and peripheral organs. Two sigma receptor subtypes (sigma1 and sigma2) have been described so far. It is known that the sigma1 receptor is involved in a number of CNS disorders and the sigma2 receptor is involved in tumor proliferation among others. Because of the important biological functions of the sigma receptor, development of structure activity relationships (SAR) can aid in the identification of potential medications and imaging agents. Three series of analogs based on three lead compounds have been synthesized and evaluated for their in vitro affinity and selectivity for the sigma1 and sigma2 subtypes.