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# Computer-Aided Design of Negative Allosteric Modulators of Metabotropic Glutamate Receptor 5 (mGluR5): Comparative Molecular Field Analysis of Aryl Ether Derivatives

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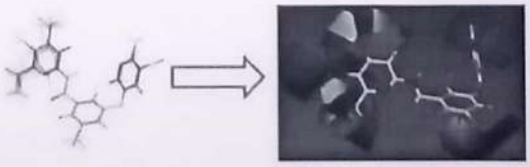
## Abstract

The metabotropic glutamate receptors (mGlu receptors) have emerged as attractive targets for number of neurological and psychiatric disorders. Recently, mGluR5 negative allosteric modulators (NAMs) have gained considerable attention in pharmacological research. Comparative Molecular Field Analysis (CoMFA) was performed on 73 analogues of aryl ether which were reported as mGluR5 NAMs. The study produced a statistically significant model with high correlation coefficient and good predictive abilities.

## Graphical abstract



### Keywords

mGluR5; Negative Allosteric Modulators; Aryl ethers; CoMFA; 3-D QSAR

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