

Total Synthesis and Cytotoxic Review of Hydantoin Derivatives with Phenyl and Cyclohexyl groups

ABSTRACT

In recent years, hydantoins have been the focus for the development of novel synthetic medicinal compounds due to the scaffold of biological applications. Different arrangements with phenyl groups and cyclohexyls (as seen in literature) add a strong biological activity to hydantoins. Our aim is to study the correlation between phenyl and cyclohexyl group in different arrangements with the biological activity of hydantoin; and, to establish the effect on cytotoxic activity of chain elongation between hydantoin and homocyclic groups. The design of potential anticancer compounds benefits the pharmaceutical industry because it could represent an alternative to current harmful treatments.