Abstract

The 6-diazo-5-oxo-L-norleucine (DON) is a glutamine antimetabolite, which has shown promissing antitumor activity in preclinical and several clinical studies. However, its high toxicity leading to gastrointestinal side effects prevented its further development. The aim of this Bachelor thesis was to prepare DON prodrugs with similar anticancer activity but less side effects. Biochemical and biological tests of synthesized prodrugs were performed at Johns Hopkins University in Baltimore (USA).

Key words: 6-diazo-5-oxo-L-norleucine (DON), prodrugs, antimetabolite, ProTide