

2-Phenylacetophenones, widely referred to as deoxybenzoins, are useful intermediates in the synthesis of many pharmaceutical and agrochemical products, in particular they are widely used as precursors in the synthesis of isoflavones.

Around 20-25% of current drugs contain at least one fluorine atom and the incorporation of a fluorine atom into biologically active molecules has become common practice due to the enhanced pharmacological properties that this can promote. The presence of fluorine can lead to increased metabolic stability due to the relative strength of the C-F bond in comparison to a C-H bond. Furthermore the electronegative nature of fluorine can alter the electronic properties and reactivity of a molecule whilst fluorine can also increase the lipophilic properties of a substance in order to facilitate the absorption and transportation of molecules in a biological system.

Fluorinated 2-phenylacetophenones therefore are considered to be potentially interesting building blocks for future drug discovery research, one example is the use of 4'-fluoro-2-phenylacetophenone in the synthesis of 2,3-diarylpyrazines & quinoxalines which have in turn been evaluated for their cyclooxygenase (COX-1/COX-2) inhibitory activity. With this in mind Apollo is pleased to offer a range of novel fluorinated 2-phenylacetophenones available in stock from our UK warehouse.

PC421007 3'-Fluoro-2-(3-fluorophenyl) acetophenone [40281-51-4]

PC421010 2',4'-Dichloro-2-(4-fluorophenyl) acetophenone [611220-24-7]

PC421012 2-(3-Fluorophenyl) -4'-fluoroacetophenone [370874-66-1]

PC421013 4'-Fluoro-2-(4-fluorophenyl) acetophenone [366-68-7]

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