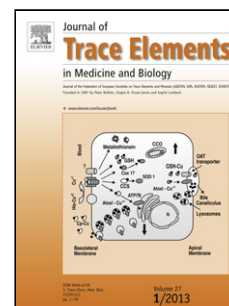


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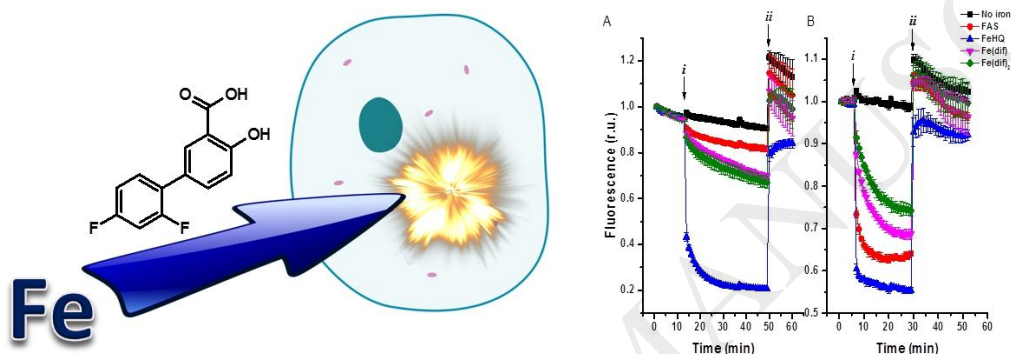
## A new ferrous diflunisal complex and its effects on biopools of labile iron

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### Graphical abstract



### Highlights

- Diflunisal forms a complex with iron(II)
- Iron-diflunisal species have access to HeLa or HepG2 cells
- Increase in labile cell iron may result in oxidative stress

### Abstract

Drugs bearing metal-coordinating moieties can alter biological metal distribution. In this work, a complex between iron(II) and diflunisal was prepared in the solid state, exhibiting the following composition:  $[\text{Fe}(\text{diflunisal})_2(\text{H}_2\text{O})_2]$ ,  $(\text{Fe}(\text{dif})_2)$ . The ability of diflunisal to alter labile pools of both plasmatic and cellular iron was investigated in this work. We found out that diflunisal does not

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