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Title:	Nuclease activity and anti-proliferative effect on human cancerous cells of a newly synthesized and characterized mononuclear copper(ii) complex [CuII(L)(fu)2] [L = 2-(2-pyridyl)benzimidazole, fu = furoate]
Authors:	Kaur, Gurpreet (/jspui/browse?type=author&value=Kaur%2C+Gurpreet) Choudhury, A.R. (/jspui/browse?type=author&value=Choudhury%2C+A.R.)
Keywords:	Chromophores Anti-proliferative effect Mononuclear copper Anti-cancer agents
Issue Date:	2014
Publisher:	Royal Society of Chemistry
Citation:	RSC Advances, 4(106), pp.61337-61342.
Abstract:	A mononuclear copper(ii) complex [CuII(L)(fu)2] (1) [L = 2-(2-pyridyl)benzimidazole, fu = furoate] has been synthesized and characterized by X-ray crystallography. Structural analysis reveals that 1 adopts a distorted square pyramidal geometry with CuN2O3 chromophore. Spectrophotometric and hydrodynamic investigations suggest that the complex binds with DNA in an intercalative mode with a binding constant of $(3.19 \pm 0.32) \times 10^4 \text{ M}^{-1}$. 1 induces oxidative cleavage of the supercoiled DNA to its nicked circular as well as linear forms. 1 is also proved to be an anti-cancer agent on human keratinocyte cells.
Description:	Only IISERM authors are available in the record.
URI:	https://pubs.rsc.org/en/content/articlelanding/2014/RA/C4RA09448D#!divAbstract (https://pubs.rsc.org/en/content/articlelanding/2014/RA/C4RA09448D#!divAbstract) http://hdl.handle.net/123456789/3086 (http://hdl.handle.net/123456789/3086)
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