

Insights into mode of action and antiproliferative study of new copper(II) complexes containing anthranilamide Schiff base moiety

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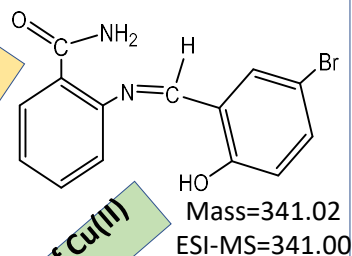


- ✓ Recent study of DNA cleavage and binding has led to understanding of nuclease function.
- ✓ Schiff bases and their metal complexes are known to interact with proteins and nucleic acids.¹
- ✓ Anthranilamide Schiff base moiety allows for facile synthesis of novel complexes with new biological activities

Objective

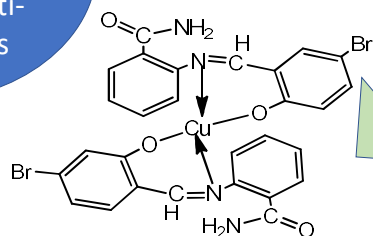
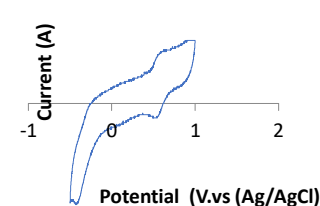
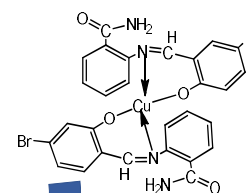
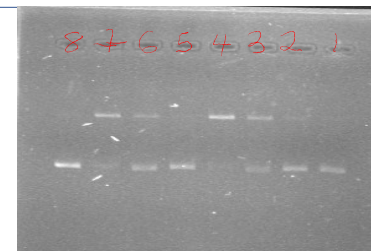
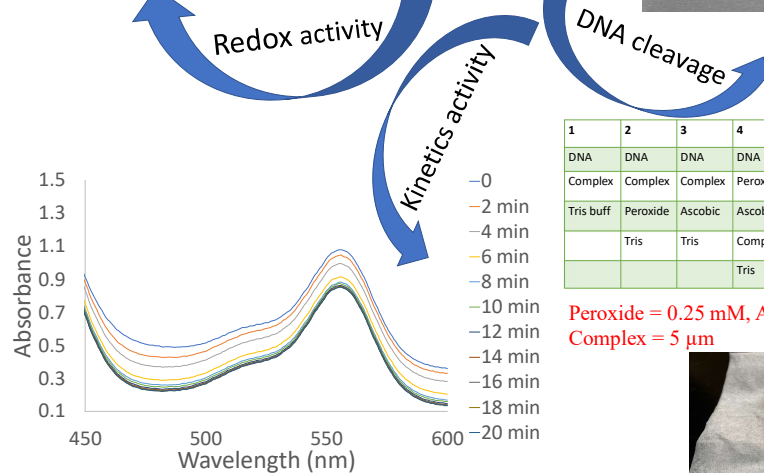
To develop new Schiff base anthranilamide complex as anti-cancer agents

Synthesis of Schiff base



Synthesis of Cu(II) complex

Mass = 699.84
ESI-MS = 699.91



1	2	3	4	5	6	7	8
DNA	DNA	DNA	DNA	DNA	DNA	DNA	DNA
Complex	Complex	Complex	Peroxide	Ascorbic	Peroxide	peroxide	Tris
Tris buff	Peroxide	Ascorbic	Ascorbic	Tris	Tris	Ascorbic	
	Tris	Tris	Complex			Tris	
			Tris				

Peroxide = 0.25 mM, Ascorbic = 0.25 mM,
Complex = 5 μ M



1. Ji D, Zhang W, Xu Y, Zhang J-J, Bioorg Med Chem2020, 28:115354

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