

Colorimetric Sensors for DNA

- **Novel colorimetric sensor**
- **Detects the presence of DNA**
- **Interacts with DNA in a specific manner and undergoes a visible colour change**
- **Prototype molecule has low toxicity and so could be used for research with live, rather than fixed, cells**

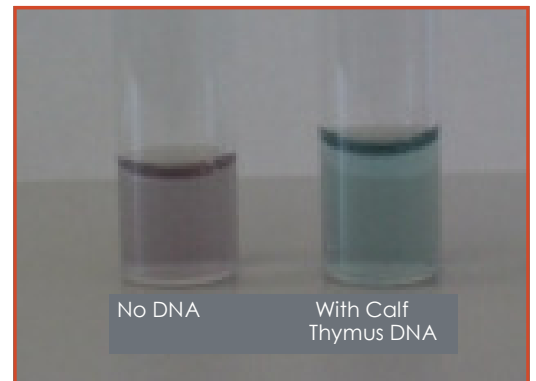


Image of the solution before the addition of DNA (left) and after the addition of calf thymus DNA (right)

The Technology

The compound is a dinuclear Ruthenium-based coordination complex which can bind to DNA and undergoes a colour change from purple to green or blue depending upon the nature of the DNA.

A striking feature of the molecule is its apparent ability to specifically bind certain DNA structures, offering the possibility of the direct detection of these structures in living cells and the use of this compound as a tool for studying cell biology.

Intellectual Property

We have filed a patent application on a family of compounds related to this molecule and their use in an array of possible applications.

The Opportunity

There are an enormous range of possible applications for this technology and we are seeking commercial partners to develop particular applications of the molecule that utilise its ability to:

- Change colour depending on the presence of different DNA sequences/structures
- Bind certain DNA structures preferentially
- Enter living cells

Further information regarding this opportunity is available under a CDA. **Please contact Andrew Tingey, quoting reference 27036.**

FUSION IP LICENSING

is a specialist company that identifies, develops and licences world class university IP to commercial companies and research organisations.

Fusion IP Licensing is wholly owned by Fusion IP plc, an AIM listed company which owns the rights to 100% of the university-owned research generated at two of the UK's leading universities – The University of Sheffield and Cardiff University

FOR MORE INFORMATION CONTACT:

Dr. Andrew Tingey

andrewtingey@fusionip.co.uk

+44(0) 114 275 5569

The Sheffield Biocubator

40 Leavygreave Road

Sheffield

S3 7RD