

# The Importance of Cellular Localisation of Probes: Synthesis, Photophysical Properties, DNA Interactions And Cellular Imaging Properties Of Rhenium Dppz Complexes With Known Cellular Localisation Vectors.

## Supporting Information

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## Photophysical studies

### Electronic absorption data

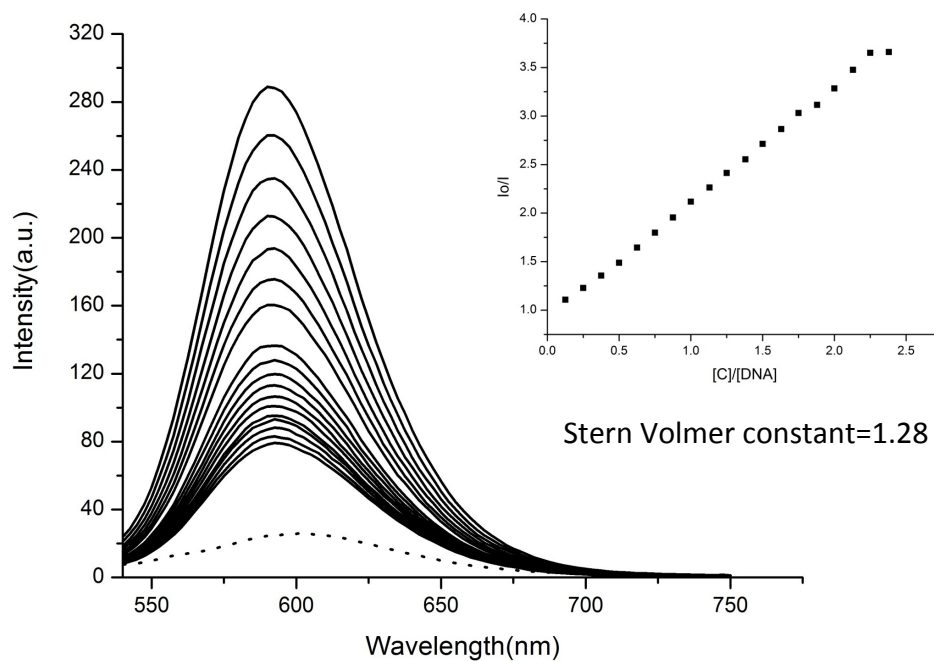
| Complex  | $\lambda_{\text{max}}$ (nm)( $\epsilon$ ) | $\lambda_{\text{max}}$ ( $\epsilon$ ) | $\lambda_{\text{max}}$ ( $\epsilon$ ) | $\lambda_{\text{max}}$ ( $\epsilon$ ) | $\lambda_{\text{max}}$ ( $\epsilon$ ) |
|----------|-------------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
| <b>3</b> | 213 (34101)                               |                                       | 279 (63916)                           | 361 (10741)                           | 380 (11083)                           |
| <b>4</b> | 209 (25152)                               |                                       | 280 (33394)                           | 360 (6516)                            | 379 (6404)                            |
| <b>5</b> | 209 (45390)                               |                                       | 277 (70994)                           | 362 (11885)                           | 380 (11842)                           |
| <b>6</b> | 208 (30843)                               |                                       | 278 (32762)                           | 361 (6726)                            | 379 (6367)                            |
| <b>7</b> | 208 (23215)                               | 230 (34336)                           | 281 (37024)                           | 363 (16226)                           | 380 (16041)                           |
| <b>8</b> | 203 (11264)                               |                                       | 277 (10896)                           | 359 (2392)                            | 379 (2248)                            |

### Luminescence data

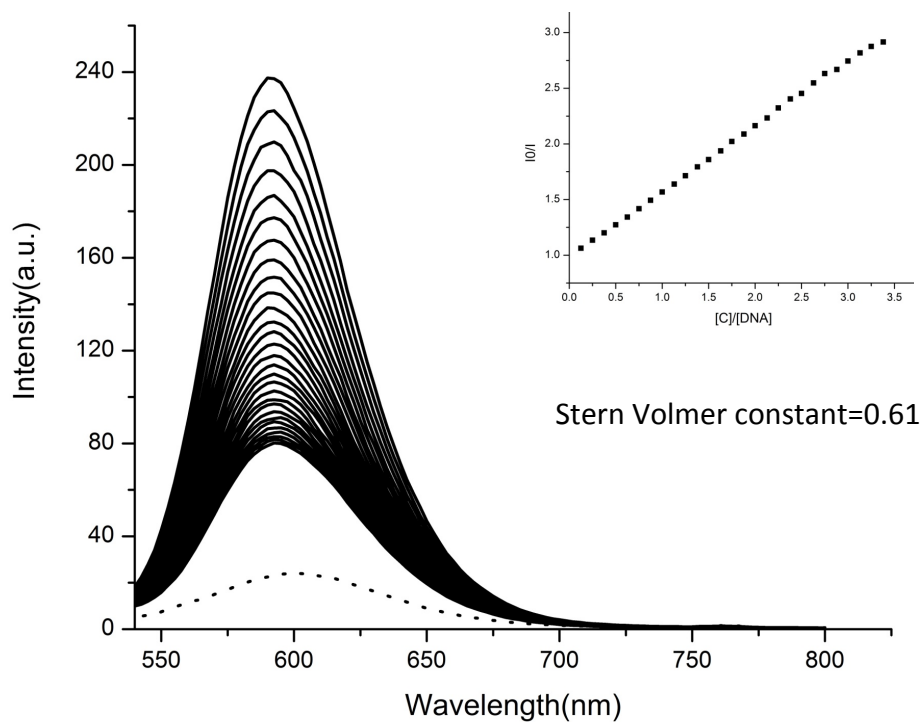
| Complex  | $\lambda_{\text{max}}$ (ex) | $\lambda_{\text{max}}$ (emm) | $\lambda_{\text{max}}$ (emm) |
|----------|-----------------------------|------------------------------|------------------------------|
| <b>3</b> | 346                         | 458                          | 549                          |
| <b>4</b> | 345                         | 495                          | 550                          |
| <b>5</b> | 343                         | 464                          | 551                          |
| <b>6</b> | 345                         | 463                          | 551                          |
| <b>7</b> | 343                         | 456                          | 547                          |
| <b>8</b> | 345                         | 448                          | 551                          |

## DNA Binding studies

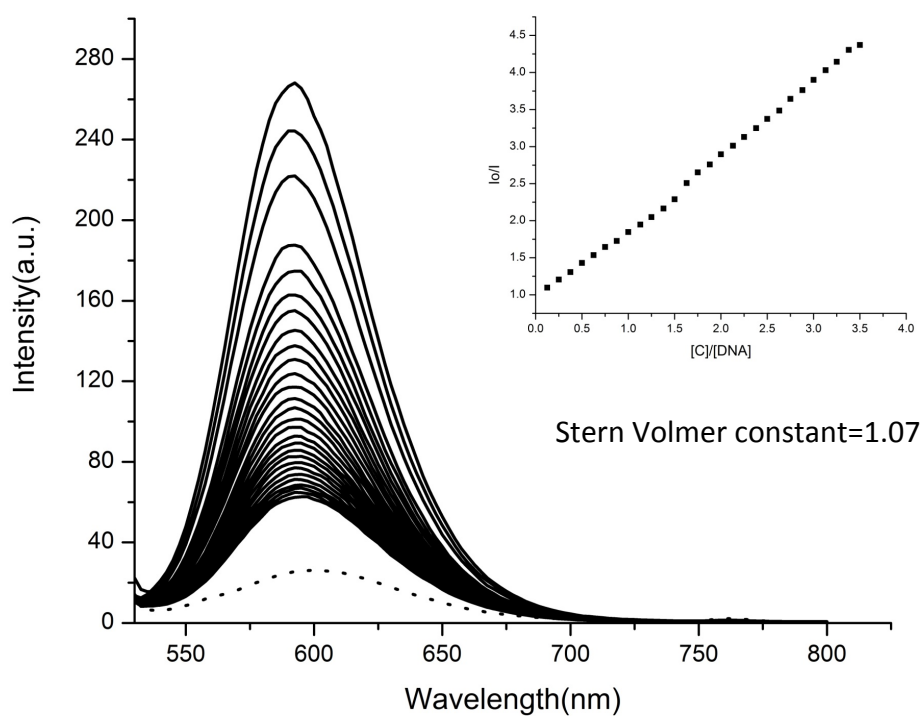
Absorption titrations (see experimental for procedures)



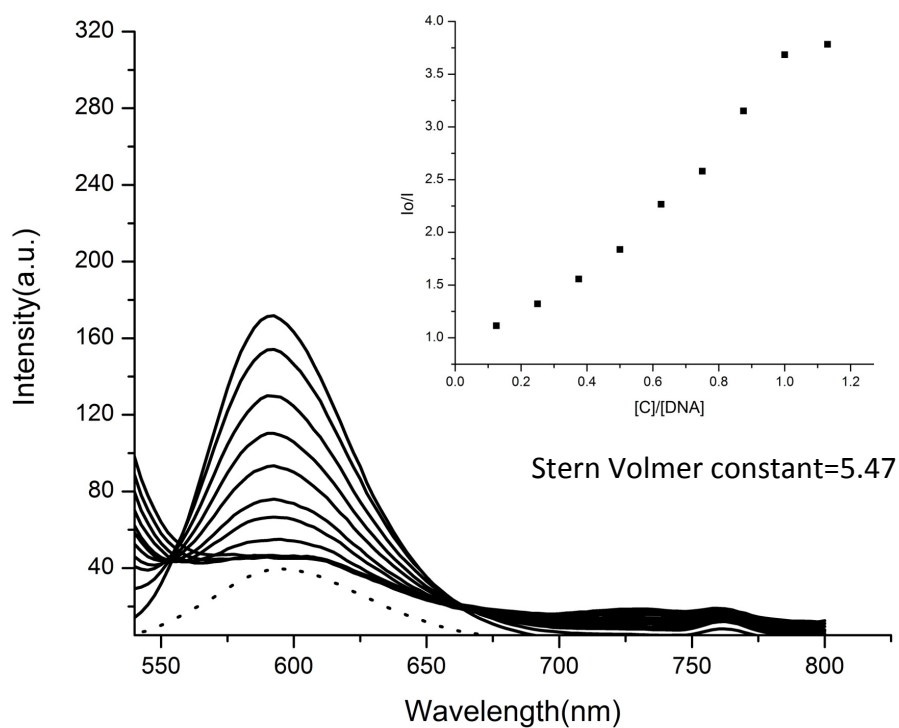
DNA Absorption titration of complex 3



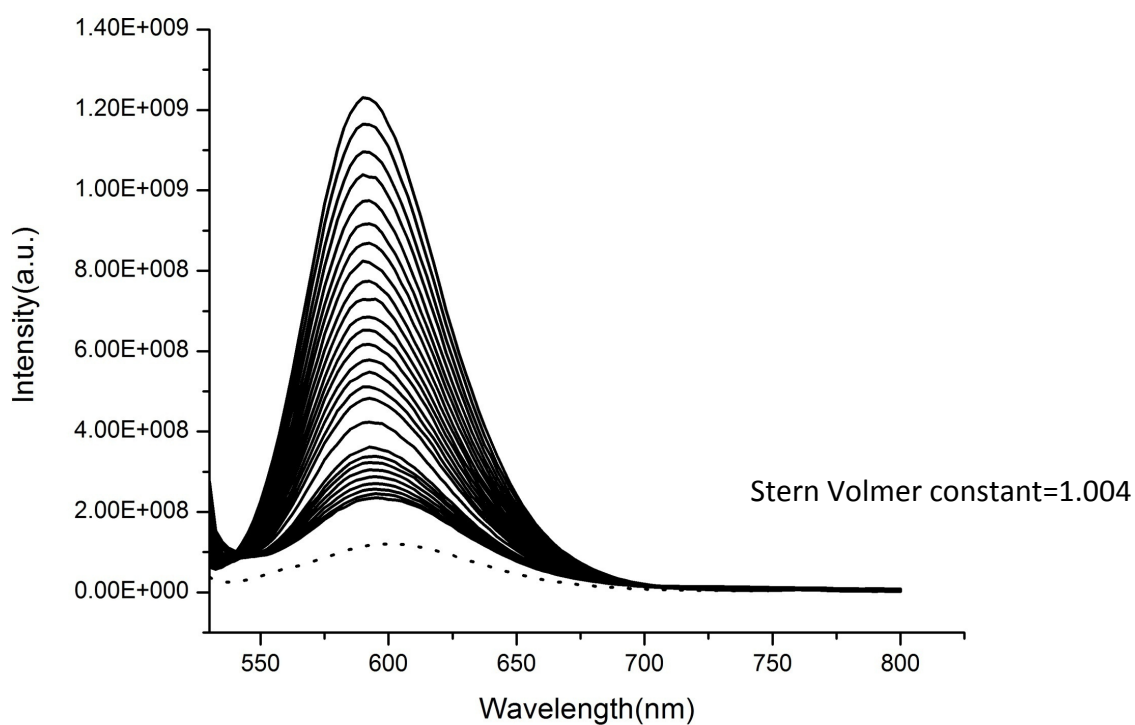
### DNA Absorption titration of complex **4**



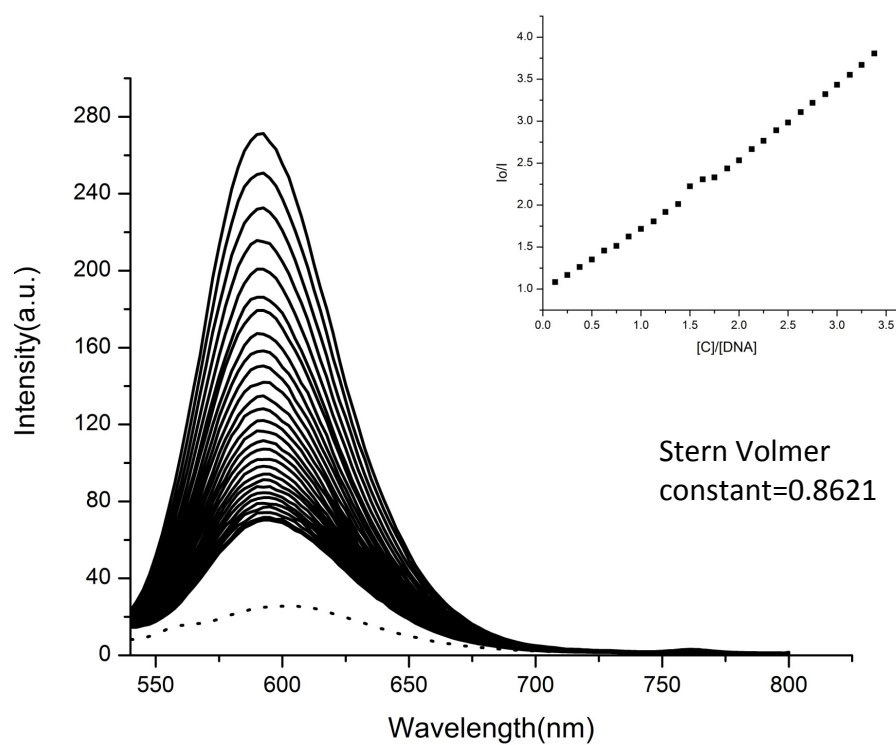
### DNA Absorption titration of complex **5**



### DNA Absorption titration of complex 6

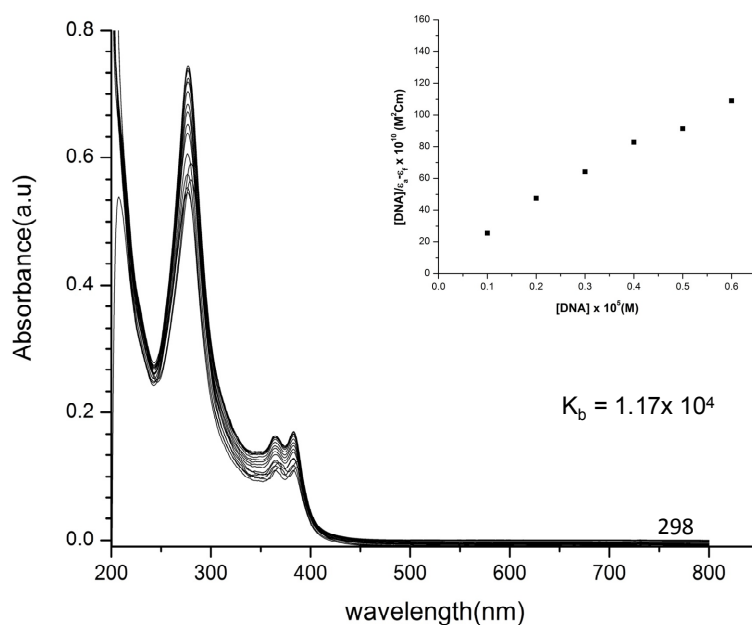


### DNA Absorption titration of complex 7

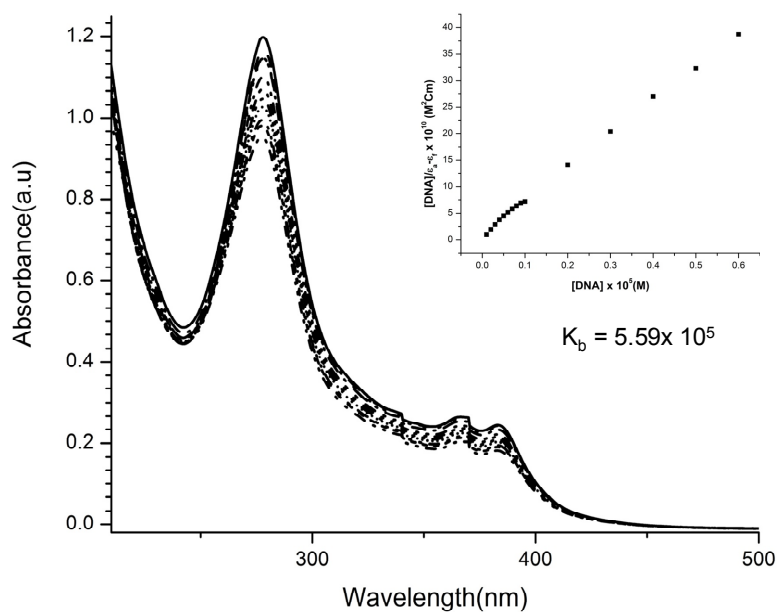


### DNA Absorption titration of complex 8

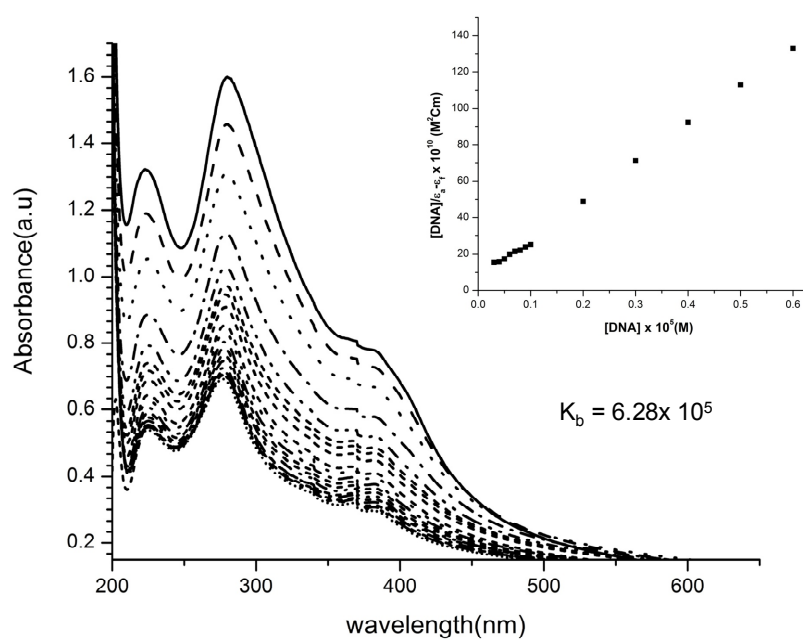
### Competitive binding titrations of complexes **3-8**. (see experimental for procedures)



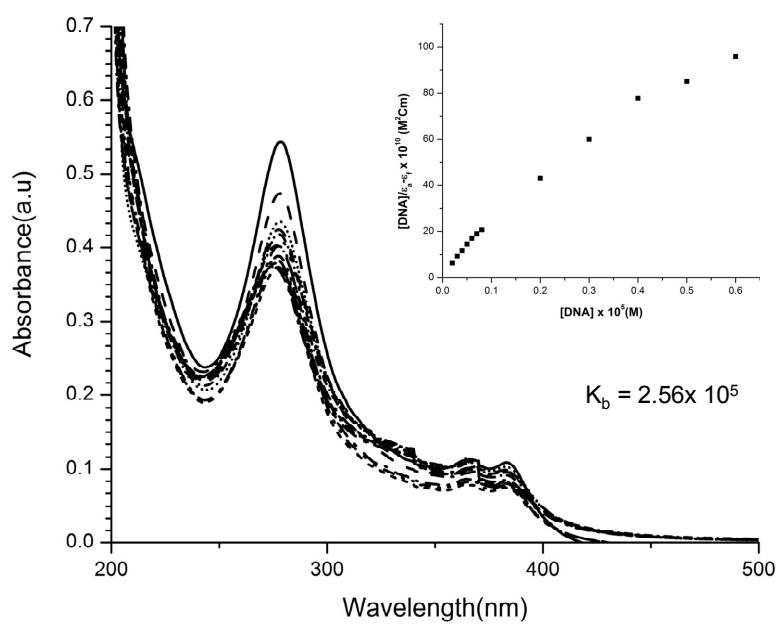
### Competitive binding titration of complex **3** with ethidium bromide



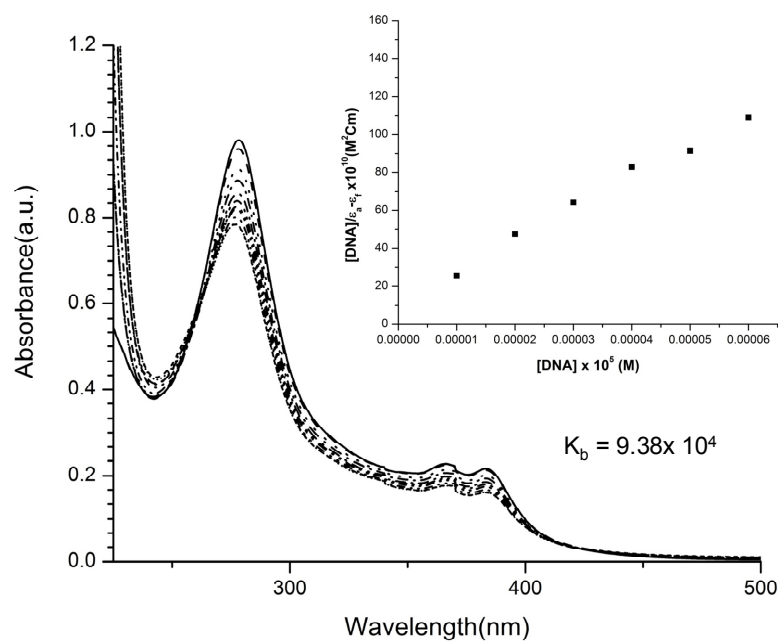
### Competitive binding titration of complex **5** with ethidium bromide



Competitive binding titration of complex **6** with ethidium bromide



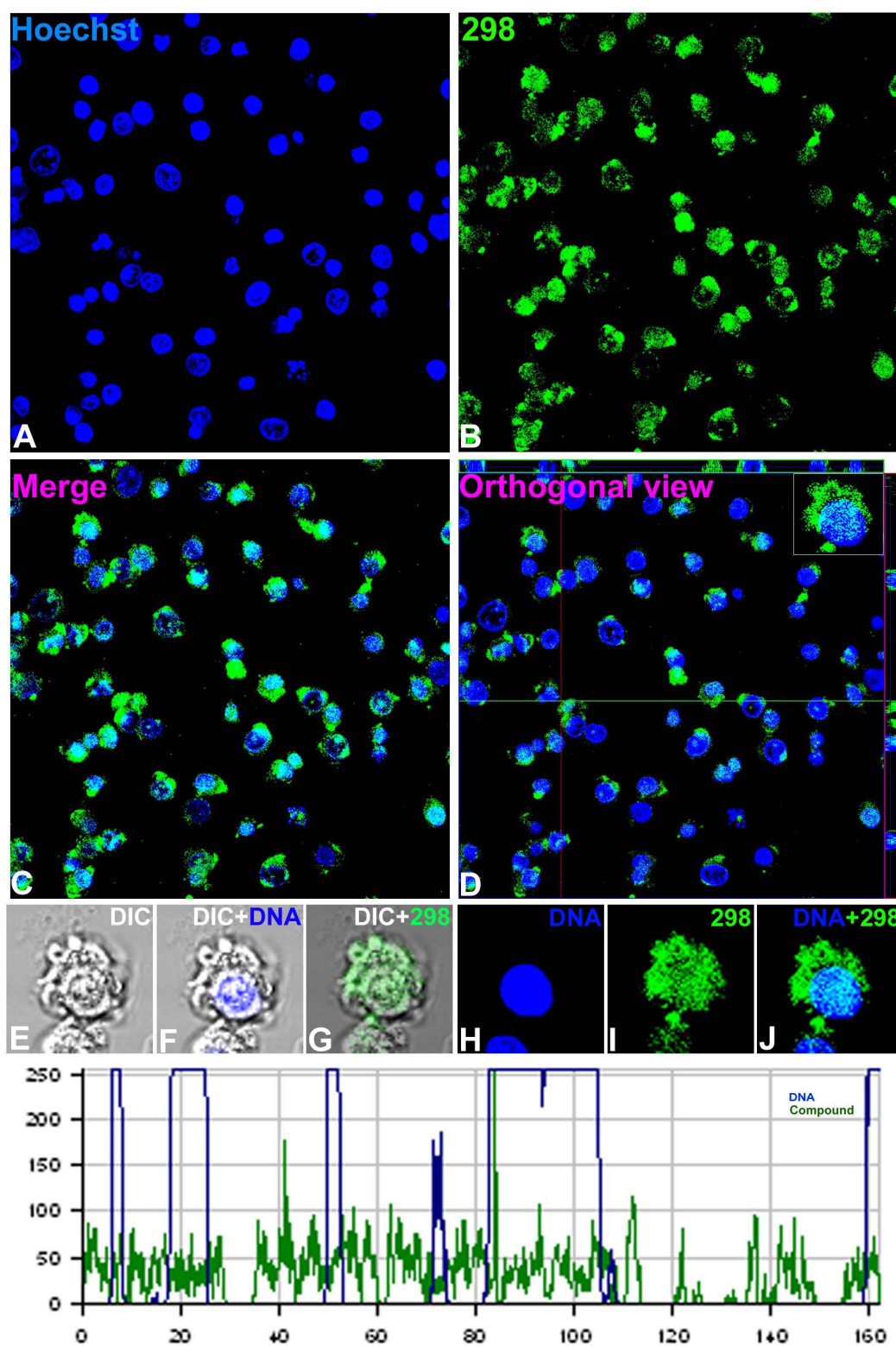
Competitive binding titration of complex **7** with ethidium bromide



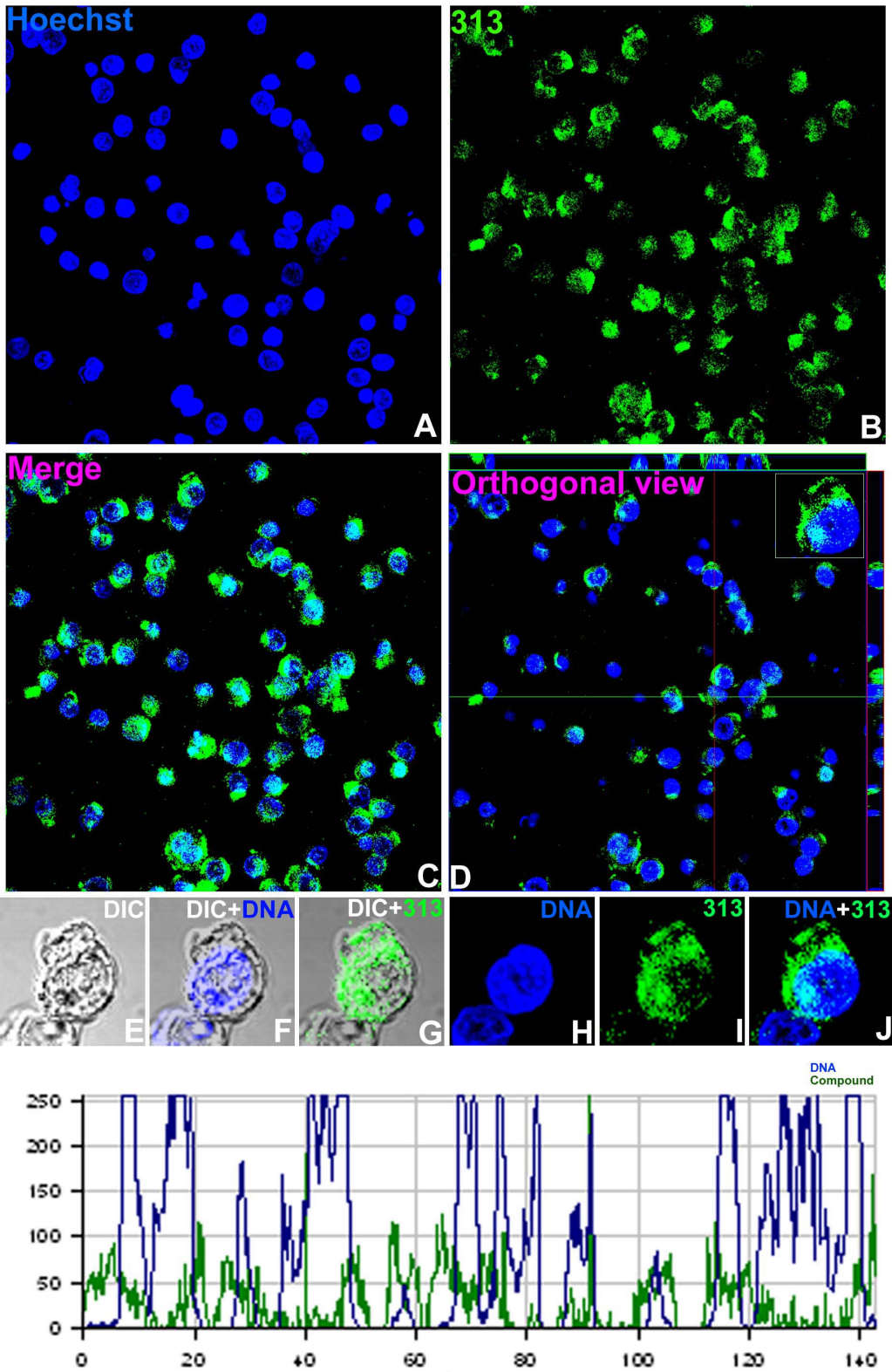
Competitive binding titration of complex **8** with ethidium bromide

## Live cell Imaging with Complexes 3, 5, 6, 8.

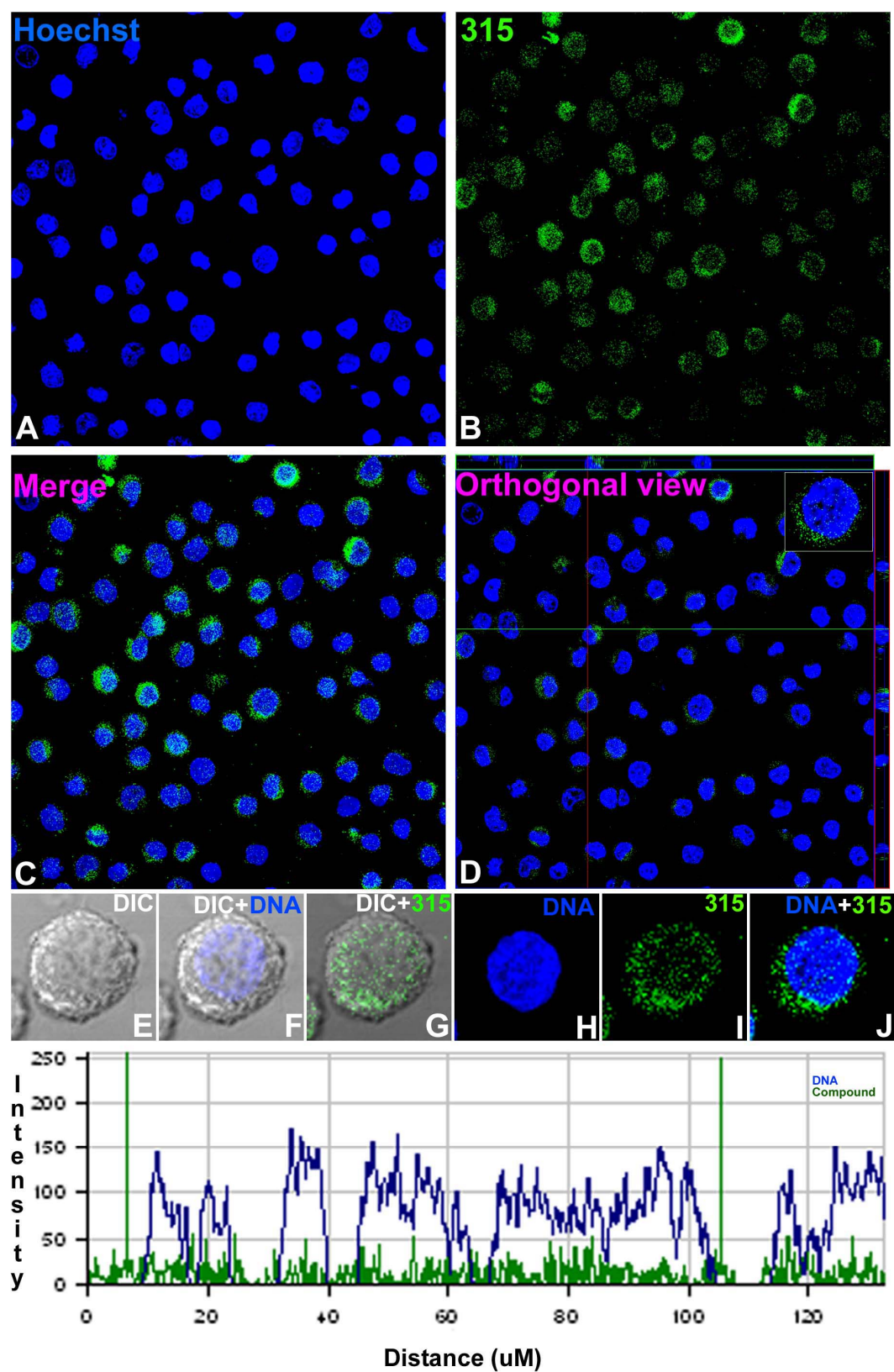
(See experimental for procedures)

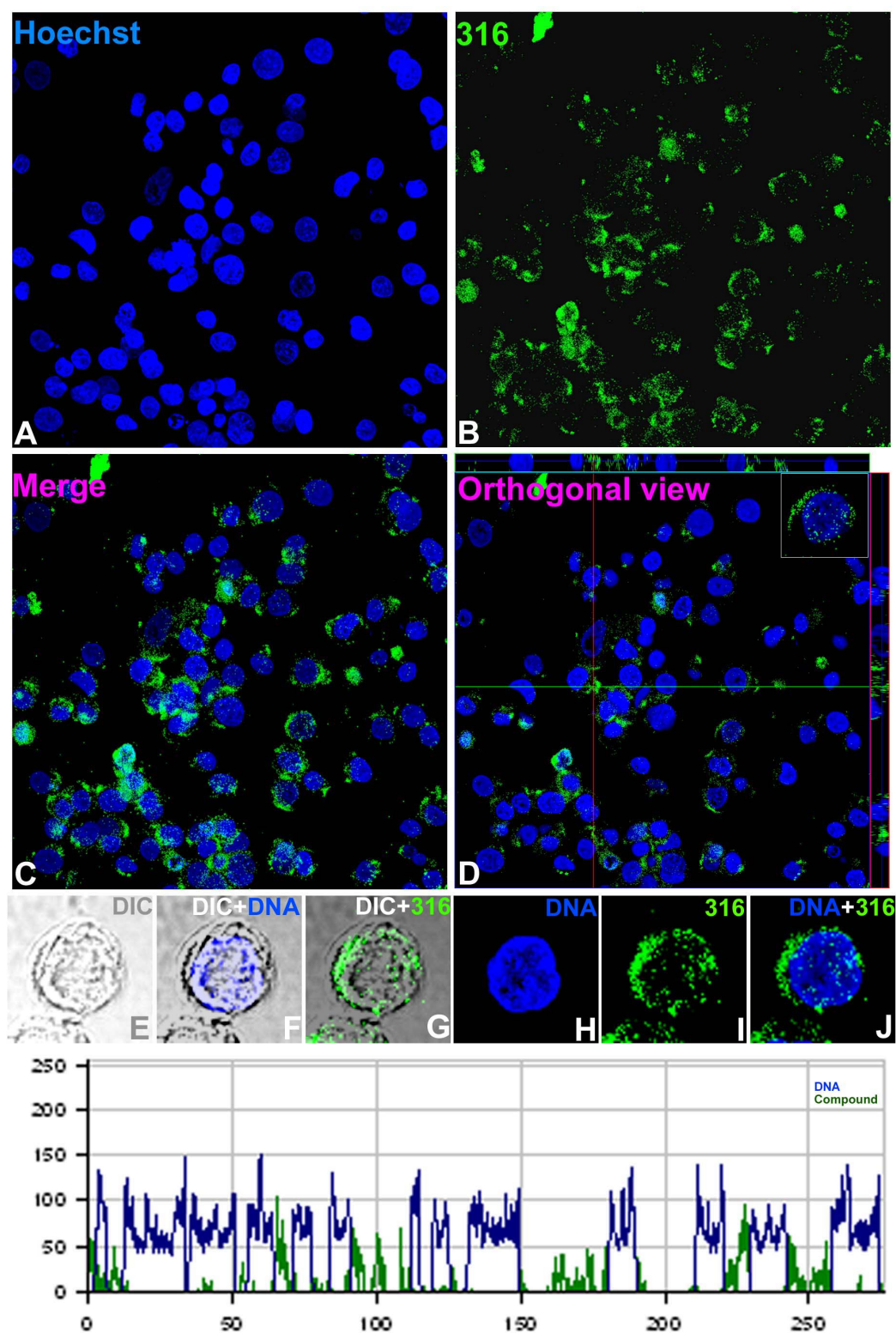


Complex 3 in HeLa cells with intensity plots



Complex 5 in HeLa cells with intensity plots





Complex 8 in HeLa cells with intensity plots