

| Fluorophore-dUTP<br>5-(3-aminoallyl)-derivative | Confocal     | STORM | Confocal   |
|---|--------------|-------|------------|
|   | Single-color |       | Dual-color |
| ATTO532   | ++           | ++    | ++         |
| Abberior CAGE 532                               | ++           | -     | ++         |
| Abberior CAGE 552                               | ++           | +     | ++         |
| Cy3   | +++          | +     | +++        |
| Cy3B  | ++           | +     | +++        |
| CF568   | +++          | +     | +++        |
| TMR   | +++          | +     | +++        |
| ATTO565   | +++          | +     | +++        |
| ATTO633   | +++          | +++   | +++        |
| AlexaFluor 647                                  | +            | +++   | +          |
| DyLight677                                      | +++          | +     | +++        |
| AlexaFluor 680                                  | -            | ++    | -          |
| CF 680  | -            | -     | -          |

Table S1