**Product number:** K1-204  
**Product name:** SeTau-380-NHS

### General Data

**Molecular Mass:** 730.93  
472.44 (protonated form)

**Solubility:** water, alcohol, DMF, DMSO  
**Insoluble:** acetone, chloroform, toluene

**Storage:** Store in absence of light, desiccated and refrigerate

### Description

Highly hydrophilic, amine-reactive, long-lifetime fluorescent label containing one NHS-ester group

### Applications

- Covalent labeling of proteins, amino-modified DNA, amino-modified oligonucleotides and lipids  
- Fluorescence lifetime applications  
- Fluorescence polarization-based assays of high molecular-weight antigens

### Advantages

- Strongly fluorescent label for proteins, oligonucleotides and other biomolecules  
- Perfectly suited for excitation with the 280-nm LED, 370-nm and 405-nm diode lasers  
- Large Stokes' shift  
- Long fluorescence lifetime in aqueous buffer  
- High fundamental polarization in absence of rotational motion.  
- Highly soluble in aqueous buffers.

### Spectral Data

<table>
<thead>
<tr>
<th>Sample</th>
<th>Absorption max.</th>
<th>Extinction Coefficient</th>
<th>Fluorescence max.</th>
<th>Q.Y.</th>
<th>Luminescence Lifetime [ns]</th>
<th>Polarization</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[nm]</td>
<td>[M⁻¹·cm⁻¹]</td>
<td>[nm]</td>
<td>[%]</td>
<td>τ₁, τ₂, Mean ἴ</td>
<td></td>
</tr>
<tr>
<td>Free dye in water</td>
<td>270</td>
<td>23,800</td>
<td>480</td>
<td>56</td>
<td>32.5 (100%)</td>
<td>32.5</td>
</tr>
<tr>
<td>BSA conjugate in water</td>
<td>383</td>
<td>1,500</td>
<td>468</td>
<td>56</td>
<td>31.9 (94%), 10.9 (6%)</td>
<td>30.6, 0.08</td>
</tr>
</tbody>
</table>

1 Excitation at 380 nm

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Absorption and emission spectra of **K1-204** in water  
Absorption and emission spectra of **K1-204 — BSA conjugate** in phosphate buffer (pH 7.4)