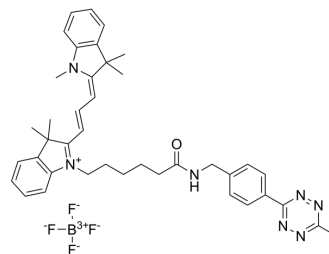


## Cy3 methyltetrazine

<b>Cat. No.:</b>	HY-151776
<b>CAS No.:</b>	2183473-57-4
<b>Molecular Formula:</b>	C <sub>40</sub> H <sub>46</sub> BF <sub>4</sub> N <sub>7</sub> O
<b>Molecular Weight:</b>	727.64
<b>Target:</b>	Fluorescent Dye
<b>Pathway:</b>	Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Cy3 methyltetrazine (TZ-Cy3) is a click chemistry reagent with methyltetrazine building blocks that is highly reactive towards cyclooctene. Cy3 methyltetrazine is also a tetrazine-modified fluorescent probe that can be used to analyze protein phosphorylation in solution and living cells <sup>[1]</sup> .
<b>In Vitro</b>	<p>Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs).</p> <p>Confocal imaging of phosphorylation in cells:</p> <ol style="list-style-type: none"> <li>1. Culture H1299 cells in a coverglass-bottom imaging dish for 24 h (take H1299 cells as an example).</li> <li>2. Incubate H1299 cells with different concentrations of ATP-NB (a ATP analogue functionalized by norbornene, which can penetrate cells and efficiently phosphorylate proteins in living cells) for 1 h.</li> <li>3. Add Cy3 methyltetrazine to label the phosphorylated protein with fluorescence.</li> <li>4. Incubate with fresh medium for 1 h.</li> <li>5. Wash the cells twice with PBS to release the free Cy3 methyltetrazine probe.</li> <li>6. Incubate the cells with 4% paraformaldehyde for 15 min and with 0.1% Triton X-100 solution at room temperature for 10 min.</li> <li>7. Wash cells 4 times with PBS.</li> <li>8. Use a confocal microscopy imaging system to obtain the high-resolution images of cells (Ex=488 nm; Em=561 nm).</li> </ol> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

[1]. Li Y, et al. Analysis of protein phosphorylation in solution and in cells by using an ATP analogue in combination with fluorescence techniques. *Analyst*. 2021 Jul 21;146(14):4506-4514.

**Caution: Product has not been fully validated for medical applications. For research use only.**

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