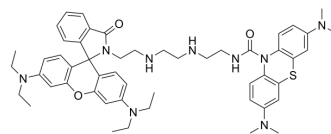


## RhFNMB

<b>Cat. No.:</b>	HY-D2333
<b>Molecular Formula:</b>	C <sub>51</sub> H <sub>63</sub> N <sub>9</sub> O <sub>3</sub> S
<b>Molecular Weight:</b>	882.17
<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>	RhFNMB is a dualchannel/localization single-molecule fluorescence probe for ATP and HOCl, with independent fluorescence responses in the light red channel with ATP ( $\lambda_{ex} = 520 \text{ nm}$ , $\lambda_{em} = 586 \text{ nm}$ ) and deep red channel with HOCl ( $\lambda_{ex} = 620 \text{ nm}$ , $\lambda_{em} = 688 \text{ nm}$ ) <sup>[1]</sup> .
<b>In Vitro</b>	<p>General Protocol</p> <ol style="list-style-type: none"> <li>Preparation of RhFNMB working solution             <ol style="list-style-type: none"> <li>Prepare a 10 mM stock solution</li> <li>Prepare a 5-10 <math>\mu\text{M}</math> RhFNMB working solution</li> </ol> <p>Note: Please adjust the concentration of RhFNMB working solution according to the actual situation.</p> </li> <li>Cell staining             <ol style="list-style-type: none"> <li>Suspension cells (6-well plate)                 <ol style="list-style-type: none"> <li>Centrifuge at 1000 g at 4°C for 3-5 min and then discard the supernatant. Wash twice with PBS, 5 min each time. The cell density is <math>1 \times 10^6/\text{mL}</math>.</li> <li>Add 1 mL of working solution, and then incubate at room temperature for 1 h.</li> <li>Centrifuge at 400 g at 4°C for 3-4 min and then discard the supernatant.</li> <li>Wash twice with PBS, 5 min each time.</li> <li>Resuspend cells with serum-free cell culture medium or PBS. Observation by fluorescence microscopy or flow cytometry.</li> </ol> </li> <li>Adherent cells                 <ol style="list-style-type: none"> <li>Culture adherent cells on sterile coverslips.</li> <li>Remove the coverslip from the medium and aspirate excess medium.</li> <li>Add 100 <math>\mu\text{L}</math> of working solution, gently shake it to completely cover the cells, and then incubate at room temperature for 1 h.</li> <li>Wash twice with medium, 5 min each time. Observation by fluorescence microscopy or flow cytometry.</li> </ol> </li> </ol> </li> </ol> <p>Precautions</p> <ol style="list-style-type: none"> <li>Please adjust the concentration of RhFNMB working solution according to the actual situation.</li> <li>This product is only for R&amp;D use, not for drug, household, or others.</li> <li>For your safety and health, please wear a lab coat and disposable gloves to operate.</li> </ol> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

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

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