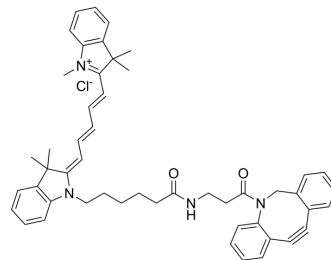


## Cy5 DBCO chloride

<b>Cat. No.:</b>	HY-D1625
<b>CAS No.:</b>	2182601-72-3
<b>Molecular Formula:</b>	C <sub>50</sub> H <sub>53</sub> ClN <sub>4</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	777.43
<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>	<p>Cy5 DBCO chloride is an azide reaction probe and the addition of DBCO molecules allows the imaging of azide-labelled biomolecules by a copper-free “Click Chemistry” reaction<sup>[1]</sup>. Cy5 DBCO (chloride) is a click chemistry reagent, it contains a DBCO group that can undergo strain-promoted alkyne-azide cycloaddition (SPAAC) with molecules containing Azide groups.</p>
<b>In Vitro</b>	<p>Cy5 DBCO chloride (2-50 μM) can control the extent of labelling by varying the concentration of DBCO-Cy5 in a dose-dependent manner, with the amount of DBCO-Cy5 bound at the cell surface increasing with increasing DBCO-Cy5 concentration<sup>[1]</sup>.</p> <p>Guidelines (Following is our recommended protocol. This protocol only provides a guideline, and should be modified according to your specific needs).</p> <ol style="list-style-type: none"> <li>1. Incubate the cells at a density of 3×10<sup>4</sup> cells in a cell culture dish for 3 days and then wash the cells twice with DPBS (pH 7.4). Incubate the cells according to your normal protocol.</li> <li>2. Incubate the cells with Cy5 DBCO chloride at a final concentration of 20 μM for 1 h at 37°C.</li> <li>3. After incubation, wash cells with DPBS (pH 7.4) and fix with formaldehyde-glutaraldehyde combination fixative for 15 min at room temperature.</li> <li>4. After fixation, wash cells twice with DPBS (pH 7.4). Analyze sample on a flow cytometer, fluorescence microscopy, or fluorescence microplate reader.</li> </ol> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

### REFERENCES

[1]. Sun-Woong Kang, et al. Cell labeling and tracking method without distorted signals by phagocytosis of macrophages. *Theranostics*. 2014 Feb 12;4(4):420-31.

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

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