

| Known Property | pancreatic alpha cell |
|---------------------------------------------|------------------------------------|
| Application | Immunofluorescence |
| Cell selectivity mechanism: POLD (glucagon) | |
| Storage | 1 Delivery: Room Temperature |
| | (2) Dried compound: 4 °C or -20 °C |

③ Compound solution: 4 °C or -20 °C





General Use Guide

alize With It is recommended to use up the buffer diluted solution within one day. The compound may be decomposed or

OH



Molecular Weight

 $\lambda_{ex} / \lambda_{em}$

324.14 (C₁₈H₁₅BF₂N₂O)

550 / 568 nm

553 / 570 nm with 200 mM of glucagon

Glucagon yellow is a pancreatic alpha cell selective probe over beta cell. Glucagon yellow showed dose dependent fluorescence increase upon treatment of glucagon with slight red shift. In pancreatic tissue, Glucagon yellow showed a good correlation with glucagon antibody, but low correlation with insulin antibody



Fluorescence colocalization images of **Glucagon Yellow** in pancreas tissue. Fluorescence microscope images of **Glucagon Yellow** (a: TRITC channel), glucagon antibody (b: Cy5 channel), insulin antibody (f: Cy5 channel) and merged images (c for a plus b, g for e plus f). Colocalization scatter plot (d: Pearson's coefficient 0.950, h: Pearson's coefficient 0.681). Scale bar 20 μ m.



Reference

1. Synthesis of a bodipy library and its application to the development of live cell glucagon imaging probe, Lee, J. S.; Kang, N. Y.; Kim, Y. K.; Samanta, A.; Feng, S.; Kim, H. K.; Vendrell, M.; Park, J. H.; Chang, Y. T.* J. Am. Chem. Soc. 2009, 131, 10077-10082.