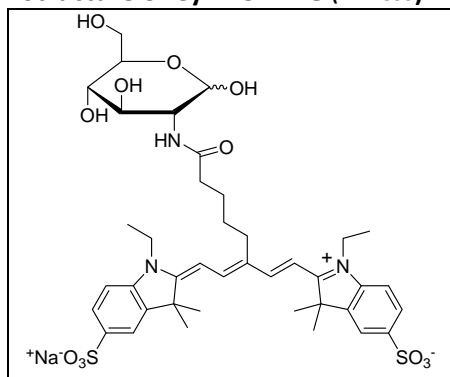


# CyAL-5 2-Deoxyglucose Optical Probe

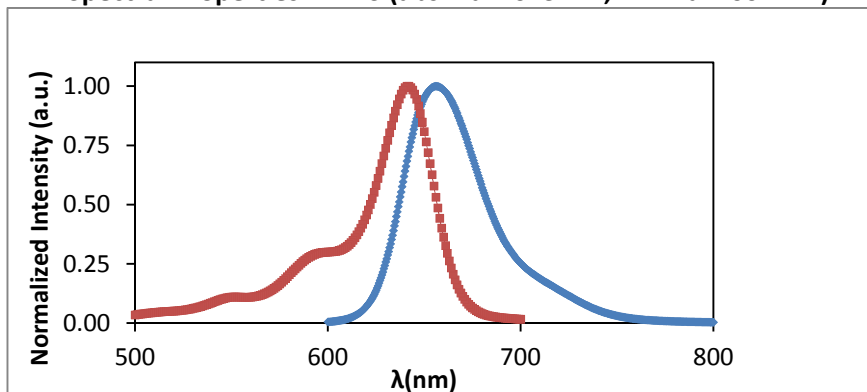
For Imaging multiple tumor types such as breast, glioblastoma, colon, and prostate

**Product Description:** CyAL-5 2-deoxyglucose (CyAL-5 2-DG) is a fluorescent imaging agent designed to target a wide spectrum of cancers such as breast, glioblastoma, colon and prostate in vitro as well as in vivo. 2-DG is a glucose analog that utilizes the GLUT transporters for entry into the cell. One of the hallmarks of many cancer cells is an elevated uptake of glucose. Numerous fluorophores, including 800CW [1] and 2-NBDG [2] have been used to label 2-DG for tumor detection. FDG has been used extensively in PET imaging for diagnosis and tumor response monitoring in various types of cancer [3,4].

## Structure of CyAL-5 2-DG (mw=853)



## Spectral Properties in PBS (abs max=643 nm; Em max=661 nm)



Catalog #	Product Name	Size	Price (USD)
DG-1001	CyAL-5 2DG	125 nmol	199.00

The recommended individual dose per mouse will range from 10-20 nmol, depending upon tumor type, size and location. Each tube contains 125 nmol of CyAL-5 2-DG optical probe.

## References:

- [1] Kovar JL, Volcheck W, Olive DM, Simpson MA (2007). Abstract #5527, Poster presentation, AACR Annual Meeting.
- [2] Lloyd PG, Hardin CD, Sturek M (1999). *Physiol Res* 48:401-410.
- [3] Hicks RJ, Wahl RL (2010). PET diagnosis and response monitoring in oncology, *Molecular Imaging, Principles and Practice*, p875-895.
- [4] Mankoff DA (2010). PET imaging in cancer clinical trials, *Molecular Imaging, Principles and Practice*, p1179-1191.

For further information or to place an order please contact Dr. Brian Gray by email: [briangray@mtarget.com](mailto:briangray@mtarget.com) or phone: 610-738-7938

**Storage and Handling:** Upon receipt, store at -20°C prior to reconstitution. Reconstituted material should be used within two weeks.

CyAL-5 is sold under an exclusive license from Harvard Medical School and Massachusetts General Hospital.



## MOLECULAR TARGETING TECHNOLOGIES, INC.

833 Lincoln Ave., Unit 9  
 West Chester, PA 19380  
 P: 610.738.7938 F: 610.738.7928  
 Contact us: [info@mtarget.com](mailto:info@mtarget.com); website: [www.mtarget.com](http://www.mtarget.com)