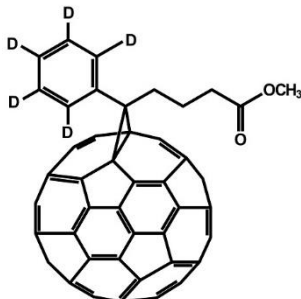




## Product information: d5-[60]PCBM and other D-labeled compounds



Deuterium-labeled fullerene derivatives can be used to study the active layers in OPV devices in great detail. At Solenne, we have a lot of experience with preparing such D-labeled compounds, including d5-[60]PCBM, d5-[70]PCBM, D-labeled bis[60]PCBM, and D-labeled ICBA. Some of these compounds are available directly from stock.

For d5-PCBM, the D-labeling is on the phenyl ring. In this way, the label is placed at a stable, non-reactive position in the molecule. All 5 hydrogen atoms are replaced by deuterium atoms, thus having a high degree of labeling (>99.5%), for easy detection.

The use of these D-labeled compounds for structure elucidation of active layers was published in: **Origin of fullerene-induced vitrification of fullerene:donor polymer photovoltaic blends and its impact on solar cell performance** - P. Westacott, N.D. Treat, J. Martin, J.H. Bannock, J.C. de Mello, M. Chabiny, A.B. Sieval, J.J. Michels and N. Stingelin - *Journal of Materials Chemistry A* **2017**, 5, 2689–2700. DOI: [10.1039/C6TA08950J](https://doi.org/10.1039/C6TA08950J)

### Detailed information:

Purity: by HPLC (360 nm, fullerene content) and <sup>1</sup>H NMR  
CoA: available on request