Lumiprobe Corporation
115 Airport Dr Suite 160
Westminster, Maryland 21157
USA
Phone: +1 888 973 6353
Fax: +1 888 973 6354
Email: order@lumiprobe.com

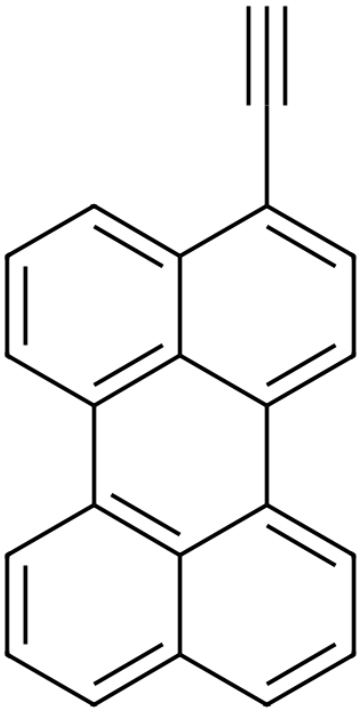
3-Ethynylperylene

http://www.lumiprobe.com/p/3-ethynyl-perylene

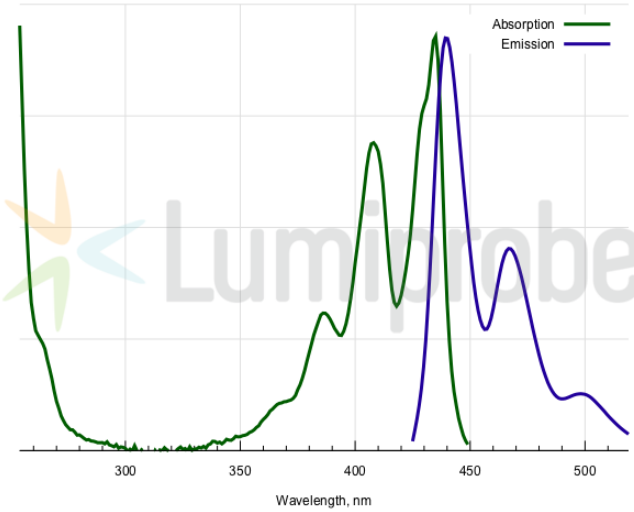
Perylene is PAH (polycyclic aromatic hydrocarbon) containing five fused rings. Planarity of this molecule gives rise to its ruggedness, low solubility of its derivatives, as well as its outstanding fluorescence.

Perylene possesses intense green fluorescence, great photostability, and quantum yield approaching unity. This makes this PAH one of the most promising blocks for the design of new molecular probes, functional materials, and molecular devices.

This molecule contains alkyne group ready for Click Chemistry, as well as for other coupling reactions such as Sonogashira cross-coupling.



Structure of 3-ethynylperylene



Perylene absorption and emission spectra

General properties

Appearance:	orange solid
Molecular weight:	276.33
CAS number:	132196-66-8
Molecular formula:	$C_{22}H_{12}$
IUPAC name:	3-Ethynylperylene
Solubility:	good in chlorinated organic solvents (DCM, chloroform), moderate in DMF, low in alcohols
Quality control:	NMR ^{1}H (95%) and ^{13}C, TLC
Storage conditions:	Storage: 24 months after receival at -20°C in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light.
Legal statement:	This Product is offered and sold for research purposes only. It has not been tested for safety and efficacy in food, drug, medical device, cosmetic, commercial or any other use. Supply does not express or imply authorization to use for any other purpose, including, without limitation, in vitro diagnostic purposes, in the manufacture of food or pharmaceutical products, in medical devices or in cosmetic products.

Spectral properties

Excitation/absorption maximum, nm:	435; 408; 252
ε, $L \cdot mol^{-1} \cdot cm^{-1}$:	36000
Emission maximum, nm:	439; 467
Fluorescence quantum yield:	1.0