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Pyrene azide 1

http://www.lumiprobe.com/p/pyrene-azide

This product will be discontinued soon in favor of Pyrene azide 2

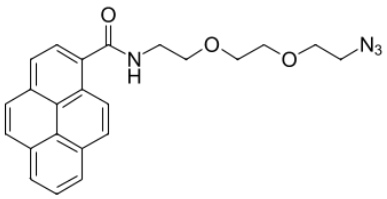
Pyrene is a polyaromatic hydrocarbon with strong short-wavelength fluorescence. Unlike other fluorescent dyes, polyaromatic hydrocarbons are fluorescent probes with a strong sensitivity to the microenvironment. Thus, its fluorescence is different in polar, and nonpolar environments. Other effects can also be observed.

When two pyrenes are in close proximity, they form excimers. Excimer formation can be easily observed, and quantitatively estimated using fluorescent spectra.

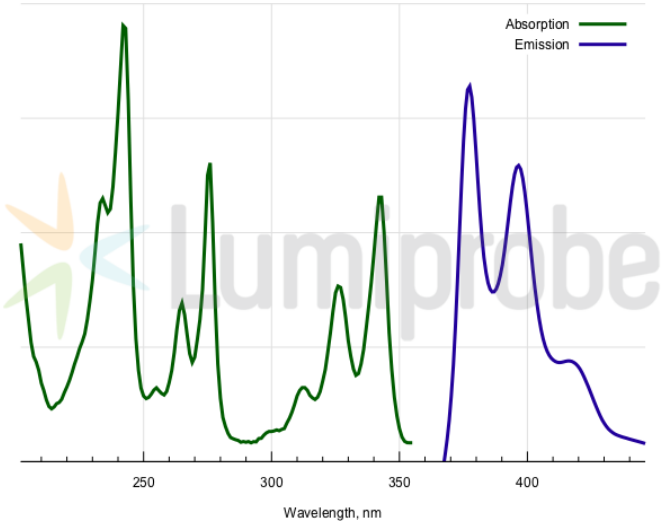
Pyrene azide is a reagent for easy pyrene click chemistry labeling of any alkyne-bearing molecule. It allows turning any molecule into a pyrene-bearing probe.

This azide contains a hydrophilic triethyleneglycol linker to mitigate intrinsic pyrene hydrophobicity and facilitate attachment to biomolecules in aqueous solutions.

Another pyrene azide for click chemistry labeling is also available: Pyrene azide 2.



Structure of Pyrene azide 1



Absorption and emission spectra of pyrene fluorophore

General properties

Appearance:	off-white to yellowish solid
Molecular weight:	402.45
CAS number:	2135330-58-2
Molecular formula:	$C_{23}H_{22}N_4O_3$
Solubility:	soluble in dichloromethane, chloroform, moderately soluble in DMSO, DMF, acetonitrile
Quality control:	NMR ^{1}H (95%)
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.

Spectral properties

Excitation/absorption maximum, nm:	343; 326; 313; 276; 265; 242; 234
Emission maximum, nm:	377; 397