

Perylene azide

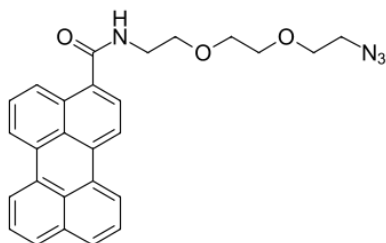
<http://www.lumiprobe.com/p/peryleno-azide>

Perylene is a bright and extremely photostable fluorescent polycyclic aromatic hydrocarbon (PAH) label with quantum yield approaching quantitative.

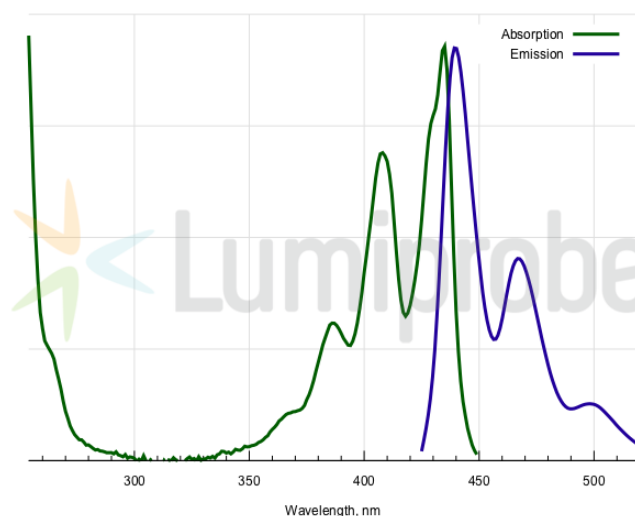
Due to low life time of fluorescence, this probe does not form excimers.

Perylene labeling of biomolecules is used to be difficult and tedious because of low solubility of perylene, and low availability of activated derivatives. However, labeling via Click Chemistry with this perylene azide is nearly as easy, as with other dyes. Labeling peptide, DNA, protein with this polyaromatic hydrocarbon has never been so simple yet.

To increase hydrophilicity, and facilitate labeling, this PAH azide contains hydrophilic triethyleneglycol linker.



Structure of perylene azide



Perylene absorption and emission spectra

General properties

Appearance:	orange-yellow solid
Molecular weight:	452.50
CAS number:	1807503-81-6
Molecular formula:	$C_{27}H_{24}N_4O_3$
IUPAC name:	3-(8-Azido-3,6-trioxaoctylaminocarbonyl)peryleno
Solubility:	good in dichloromethane and chloroform, moderate in DMSO, DMF, and acetonitrile
Quality control:	NMR 1H (95%)
Storage conditions:	Storage: 24 months after receipt at $-20^\circ C$ in the dark. Transportation: at room temperature for up to 3 weeks. Avoid prolonged exposure to light.
TN VED Code:	3204190000

Spectral properties

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