
Azide-PEG3-iodide

<http://www.lumiprobe.com/p/iodo-peg3-azide>

Azide-PEG3-iodide contains a highly reactive iodide functional group that can alkylate a variety of C-, O-, N-, S-centered, and other nucleophiles.

Organic iodides are roughly an order of magnitude more active than bromides and four orders of magnitude more active than chlorides in S_N2 reactions. This means that the same alkylation will take 10x less time with iodide than with bromide. Therefore, this molecule helps to effect very fast alkylation.

PEG3 is a moderately long hydrophilic linker. The azide group participates in click chemistry reactions. It is also easily reduced to an amine group.

General properties

Appearance: colorless to yellow oil

Molecular weight: 285.08

CAS number: 1309457-01-9

Molecular formula: $C_6H_{12}N_3IO_2$

IUPAC name: 1-(2-azidoethoxy)-2-(2-iodoethoxy)ethane

Solubility: soluble in water, polar organic solvents

Quality control: NMR 1H , GC-MS (95%)

Storage conditions: Storage: 24 months after receipt at $-20^\circ C$ in the dark. Transportation: at room temperature for up to 3 weeks. Desiccate.