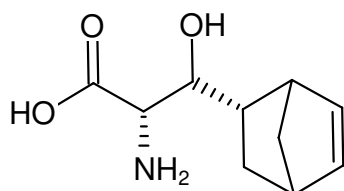




3-Norbornene-L-serine

2-amino-3-bicyclo[2.2.1]hept-5-en-2-yl-3-hydroxypropanoic acid

Cat. No.	Amount
CLK-109-25	25 mg
CLK-109-100	4 x 25 mg



Structural formula of 3-Norbornene-L-serine

For research use only!

Shipping: shipped on gel packs

Storage Conditions: store at -20 °C

Additional Storage Conditions: store dry

Shelf Life: 12 months after date of delivery

Molecular Formula: C₁₀H₁₅NO₃

Molecular Weight: 197.23 g/mol

Exact Mass: 197.11 g/mol

Purity: ≥ 90 % (HPLC)

Form: powder

Color: white to off-white

Solubility: 80 % EtOH / 0.2M NH₄OH up to 100 mM

Description:

The inverse-electron demand Diels-Alder reaction of a novel amino acid bearing a norbornene moiety 3-norbornene-L-serine with tetrazines is a bioorthogonal reaction that possesses exceptional kinetics (0.59 M⁻¹s⁻¹) and selectivity. Both the carboxylic acid and the amine functionalities on 3-norbornene-L-serine make it an ideal linker for the functionalization of diverse compounds by using N-hydroxysuccinimide ester and amine-carboxylic acid coupling system.

Note:

Prepare the stock solution of 3-norbornene-L-serine immediately before use.

Selected References:

Knall, A.C. *et al.* (2014) Kinetic studies of inverse electron demand Diels-Alder reactions (IEDDA) of norbornenes and 3,6-dipyridin-2-yl-1,2,4,5-tetrazine.

Tetrahedron Lett **55(34)**:4763.

Lukesch, M. (2019) Novel amino acids bearing a norbornene moiety. U.S. Patent WO2019016354A1.