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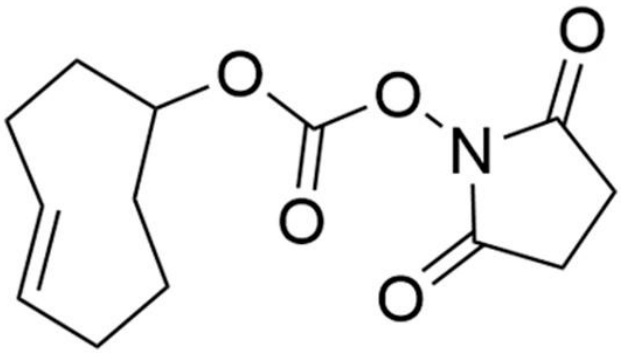
TCO-NHS ESTER (AXIAL)

SKU: CCT-1509



DESCRIPTION

TCO-NHS Ester is an amine-reactive building block used for modification of amine-containing molecule in organic media. TCO-NHS ester is supplied as a single axial (minor, *rel*-(1S-2S-5E-pS), ref 1 and 4) diastereomer. Specially formulated crystalline provides easy handling and extended shelf life.

Axial TCO derivatives demonstrate much higher reactivity in the inverse electron demand cycloaddition reaction compared to equatorial TCO derivatives. Up to 10-fold increase in reactivity was reported (ref 4) compared to equatorial TCO derivatives. At the same time, the axial TCO derivatives undergo *cis-trans* deactivation at faster rate compared to equatorial TCO derivatives (ref 4).

SPECIFICATIONS

CAS Number	1610931-22-0
Molecular Weight	267.28
Appearance	White to slightly grey crystalline
Chemical Formula	C13H17NO5

For research use only. Not intended for therapeutic or diagnostic use in animals or humans.

Purity	>95% (HPLC)
Unit Size	25 mg, 100 mg, 1000 mg
Solubility	DMSO, DMF, DCM, THF, Chloroform
Storage Instructions	-20°C. Desiccate
Shipping Conditions	Dry ice
Shipping Instructions	Dry ice

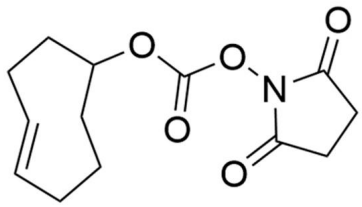
SELECTED REFERENCES

1. Royzen, M., *et al.* (2008). A Photochemical Synthesis of Functionalized trans-Cyclooctenes Driven by Metal Complexation. *J. AM. CHEM. SOC.,* **130**: 3760-1. [PubMed]
2. Blackman, M.L., *et al.* (2008). Tetrazine ligation: fast bioconjugation based on inverse-electron-demand Diels-Alder reactivity. *J. AM. CHEM. SOC.,* **130**: 13518-9. [PubMed]
3. Rahim, M.K., *et al.* (2015). Enhancing Reactivity for Bioorthogonal Pretargeting by Unmasking Antibody-Conjugated trans-Cyclooctenes. *Bioconjugate Chem.,* **26**: 352-60. [PubMed]
4. Rossin, R., *et al.* (2013). Highly Reactive trans-Cyclooctene Tags with Improved Stability for Diels−Alder Chemistry in Living Systems. *Bioconjugate Chem.,* **24**: 1210-7. [PubMed]

DOCUMENTS

- Safety Data Sheet
- Download CoA
- Datasheet

GALLERY IMAGES



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