PRODUCT INFORMATION



Biotin-azide

Item No. 13040

CAS Registry No.: 908007-17-0

Formal Name: (3aS,4S,6aR)-N-(3-azidopropyl)

hexahydro-2-oxo-1H-thieno[3,4-d]

imidazole-4-pentanamide

Synonyms: Azido-biotin, Click Tag™ Biotin-azide

MF: $C_{13}H_{22}N_6O_2S$

FW: 326.4 **Purity:** ≥98%

Supplied as: A crystalline solid

Storage: -20°C Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Biotin-azide is supplied as a crystalline solid. A stock solution may be made by dissolving the biotin-azide in the solvent of choice, which should be purged with an inert gas. Biotin-azide is soluble in the organic solvent DMSO, at a concentration of approximately 5 mg/ml.

Biotin-azide is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, biotinazide should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. Biotin-azide has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Biotin-azide is a form of biotin with a terminal azide group. It is used to add biotin to other molecules that bear either an alkyne group, through click chemistry, or a phosphine group, using Staudinger ligation.^{1,2} Biotin-azide has been commonly used to biotin-tag alkynylated lipids, particularly those associated with proteins through post-translational modification. 1.3.4 It can also be used to biotin-tag proteins, lipids, carbohydrates, and nucleic acids that have been modified with alkyne or phosphine groups.⁵⁻⁸

References

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- 3. Kim, H.-Y.H., Tallman, K.A., Liebler, D.C., et al. Mol. Cell Proteomics 8(9), 2080-2089 (2009).
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- 7. Sohn, C.H., Agnew, H.D., Lee, J.E., et al. Anal. Chem. 84(6), 2662-2669 (2012).
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WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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