

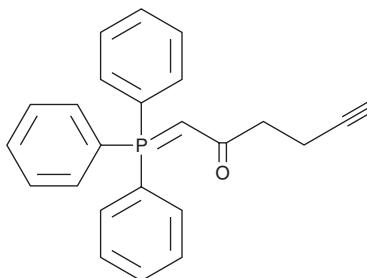
PRODUCT INFORMATION



WYneC

Item No. 42009

CAS Registry No.: 74763-44-3
Formal Name: 1-(triphenylphosphoranylidene)-5-hexyn-2-one
Synonym: Wittig-alkyne C
MF: C₂₄H₂₁OP
FW: 356.4
Purity: ≥95%
Supplied as: A solid
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

WYneC is supplied as a solid. A stock solution may be made by dissolving the WYneC in the solvent of choice, which should be purged with an inert gas. WYneC is sparingly soluble (1-10 mg/ml) in ethanol and DMSO.

Description

WYneC is a chemoselective probe for the detection of sulfenylated proteins in live cells.^{1,2} It is selective for a sulfenylated dipeptide over sulfinic acid- or sulfonic acid-containing dipeptides, reduced glutathione (GSH), glutathione disulfide (GSSG), and S-nitrosoglutathione (GSNO), as well as cysteine sulfinic acid and glutathione sulfonic acid, in cell-free assays.¹ WYneC also selectively binds to C64,82S glutathione peroxidase 3 (GPX3) containing a sulfenic acid at Cys36 over C64,82S GPX3 containing a reduced thiol, sulfinic acid at Cys36, or an intramolecular disulfide bond in cell-free assays. It binds to sulfenylated proteins in live cells and can then be conjugated to azide-containing fluorescent probes for detection.

References

1. Shi, Y., Fu, L., Yang, J., *et al.* Wittig reagents for chemoselective sulfenic acid ligation enables global site stoichiometry analysis and redox-controlled mitochondrial targeting. *Nat. Chem.* **13(11)**, 1140-1150 (2021).
2. He, J.-X., Fei, Z.-C., Fu, L., *et al.* A modification-centric assessment tool for the performance of chemoproteomic probes. *Nat. Chem. Biol.* **18(8)**, 904-912 (2022).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

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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