

PRODUCT INFORMATION



AP219

Item No. 17101

CAS Registry No.: 779282-36-9

Formal Name: (9-carboxynonyl)triphenyl-phosphonium

MF: C₂₈H₃₄O₂P

FW: 433.6

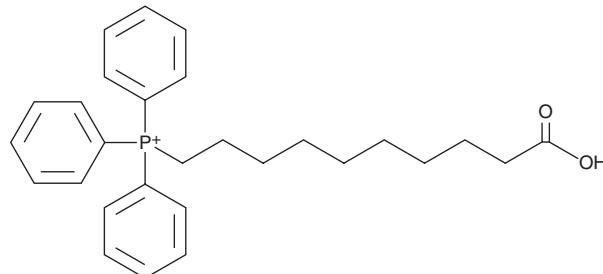
Purity: ≥98%

UV/Vis.: λ_{max}: 225 nm

Supplied as: A 50 mg/ml solution in dichloromethane

Storage: -20°C

Stability: ≥2 years



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

Laboratory Procedures

AP219 is supplied as a solution in dichloromethane. To change the solvent, simply evaporate the dichloromethane under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of AP219 in these solvents is approximately 15, 20, and 10 mg/ml, respectively.

AP219 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the dichloromethane solution of AP219 should be diluted with the aqueous buffer of choice. The solubility of AP219 in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

AP39 (Item No. 17100) is a compound used to increase the levels of hydrogen sulfide (H₂S) within mitochondria.¹ It consists of a mitochondria-targeting motif (triphenylphosphonium) coupled to an H₂S-donating moiety (dithiolethione) by an aliphatic linker. AP219 is a control compound for AP39, containing the triphenylphosphonium scaffold but lacking the H₂S-releasing portion.¹

Reference

1. Szczesny, B., Módis, K., Yanagi, K., et al. AP39, a novel mitochondria-targeted hydrogen sulfide donor, stimulates cellular bioenergetics, exerts cytoprotective effects and protects against the loss of mitochondrial DNA integrity in oxidatively stressed endothelial cells *in vitro*. *Nitric Oxide* **41**, 120-130 (2014).

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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