

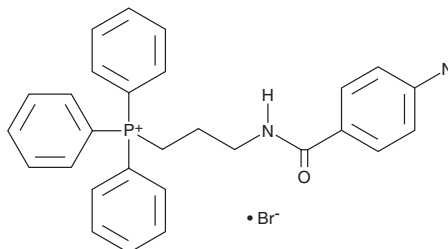
PRODUCT INFORMATION



MitoA

Item No. 22702

Formal Name: (3-(4-azidobenzamido)propyl) triphenylphosphonium, monobromide
MF: $C_{28}H_{26}N_4OP \cdot Br$
FW: 545.4
Purity: $\geq 95\%$
UV/Vis.: λ_{max} : 269 nm
Supplied as: A crystalline solid
Storage: $-20^{\circ}C$
Stability: ≥ 4 years



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

Laboratory Procedures

MitoA is supplied as a crystalline solid. A stock solution may be made by dissolving the MitoA in the solvent of choice, which should be purged with an inert gas. MitoA is sparingly soluble in DMSO and dimethyl formamide.

Description

MitoA is a ratiometric mass spectrometry probe that can be used for assessing changes in H_2S within mitochondria *in vivo*.¹ MitoA contains a triphenylphosphonium cation component that drives its accumulation in mitochondria where its aryl azide moiety selectively reacts with H_2S to produce an amine product, MitoN. Quantifying the MitoN/MitoA ratio by LC-MS/MS reflects the mitochondrial matrix H_2S concentration. In a mouse model of acute myocardial infarction with MitoA administered prior to ischemia, the MitoN/MitoA ratio is increased only in the region of ischemia.

Reference

1. Arndt, S., Baeza-Garza, C.D., Logan, A., *et al.* Assessment of H_2S *in vivo* using the newly developed mitochondria-targeted mass spectrometry probe MitoA. *J. Biol. Chem.* **292**(19), 7761-7773 (2017).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 03/27/2025

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM