PRODUCT INFORMATION



MitoA

Item No. 22702

Formal Name: (3-(4-azidobenzamido)propyl)

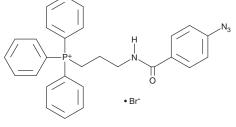
triphenylphosphonium, monobromide

C₂₈H₂₆N₄OP ● Br MF:

FW: 545.4 **Purity:** ≥95% λ_{max} : 269 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C Stability: ≥2 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 H₂S 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 H₂S 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 H₂S 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.

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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