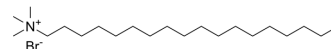


## Trimethyloctadecylammonium bromide

**Cat. No.:** HY-W013158  
**CAS No.:** 1120-02-1  
**Molecular Formula:** C<sub>21</sub>H<sub>46</sub>BrN  
**Molecular Weight:** 392.51  
**Target:** Dynamin  
**Pathway:** Cytoskeleton  
**Storage:** 4°C, protect from light  
 \* In solvent : -80°C, 6 months; -20°C, 1 month (protect from light)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 10 mg/mL (25.48 mM; Need ultrasonic)

	Solvent Concentration	Mass	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM		2.5477 mL	12.7385 mL	25.4771 mL
	5 mM		0.5095 mL	2.5477 mL	5.0954 mL
	10 mM		0.2548 mL	1.2739 mL	2.5477 mL

Please refer to the solubility information to select the appropriate solvent.

### BIOLOGICAL ACTIVITY

#### Description

Trimethyloctadecylammonium bromide is an inhibitor of dynamin, with an IC<sub>50</sub> value of 1.9 μM for dynamin I. Trimethyloctadecylammonium bromide exhibits antibacterial activity against Staphylococcus aureus<sup>[1][2]</sup>.

#### IC<sub>50</sub> & Target

IC<sub>50</sub>: 1.9 μM (Dynamin I)<sup>[1]</sup>

#### In Vitro

Trimethyloctadecylammonium bromide (1 μM-100 μM; 10 min) inhibits EGF-A488 endocytosis in COS-7 cells, with an IC<sub>50</sub> value of 16 μM<sup>[1]</sup>.  
 Trimethyloctadecylammonium bromide (30 μM; 10 min; 37 °C) shows no effect on EGFR activation in A431 cells with insignificant EGFR autophosphorylation change<sup>[1]</sup>.  
 Trimethyloctadecylammonium bromide (stearyl-) (1 nM-1 mM) inhibits Staphylococcus aureus with of 59.5 nM (CKD assay) and 0.33 mM (CMC assay), respectively<sup>[2]</sup>.  
 MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

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[1]. Quan A, et al. Myristyl trimethyl ammonium bromide and octadecyl trimethyl ammonium bromide are surface-active small molecule dynamin inhibitors that block endocytosis mediated by dynamin I or dynamin II. Mol Pharmacol. 2007 Dec;72(6):1425-39.

[2]. Baley GJ, et al. Bactericidal properties of quaternary ammonium compounds in dispersed systems. J Pharm Sci. 1977 May;66(5):696-9.

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**Caution: Product has not been fully validated for medical applications. For research use only.**

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA