

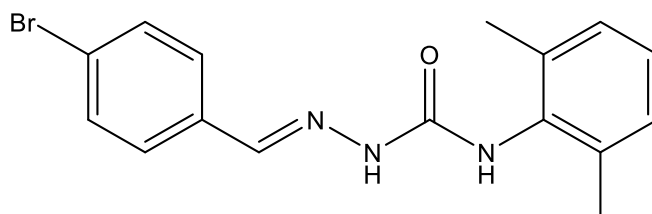
Catalog # 10-3689

EGA

CAS# 415687-81-9

2-[(4-Bromophenyl)methylene]-N-(2,6-dimethylphenyl)-hydrazinecarboxamide

Lot # S105157



EGA is a novel selective inhibitor of endosomal trafficking which blocks cellular entry of lethal toxin and other acid-dependent bacterial toxins and viruses into mammalian cells¹. Inhibits Anthrax lethal toxin-induced RAW264.7 cell death, $IC_{50}=1.7 \mu M$.¹ Delays lysosomal targeting and degradation of the EGF receptor indicating that it targets host membrane trafficking.¹ Does not block endosomal recycling of transferrin, retrograde trafficking of ricin, phagolysosomal trafficking or phagosome permeabilization by *Franciscella tularensis*, nor does it neutralize acidic organelles.¹ Protects mammalian cells from *Clostridium difficile* CDT, *Clostridium perfringens* Iota toxin and *Clostridium botulinum* C2 toxin.² A useful tool for exploring subcellular trafficking of various bacterial toxins.³

- 1) Gillespie *et al.* (2013), *Selective inhibitor of endosomal trafficking pathways exploited by multiple toxins and viruses*; Proc. Natl. Acad. Sci. USA, **110** E4904
- 2) Schnell *et al.* (2016), *EGA Protects Mammalian Cells from Clostridium difficile CDT, Clostridium perfringens Iota Toxin and Clostridium botulinum C2 Toxin*; Toxins (Basel), **8** 101
- 3) Dixon *et al.* (2015), *Distinct Roles for CdtA and CdtC during Intoxication by Cytolethal Distending Toxins*; PLoS One, **10** e0143977

PHYSICAL DATA

Molecular Weight:	346.23
Molecular Formula:	C ₁₆ H ₁₆ BrN ₃ O
Purity:	>95% by TLC
	NMR: (Conforms)
Solubility:	DMSO (50 mg/ml); ethanol (10 mg/ml with warming)
Physical Description:	White solid
Storage and Stability:	Store as supplied desiccated at -20°C for up to 2 years from the date of purchase.
	Solutions in DMSO may be stored at -20°C for up to 3 months.

Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.

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