

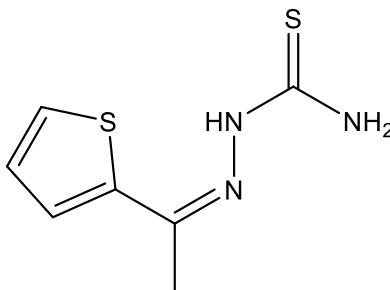
**Catalog # 10-5075**

**SSAA09E1**

CAS# 433212-75-0

[(Z)-1-Thiophene-2-ylethylideneamino]thiourea

Lot # S105188



SSAA09E1 is an inhibitor of SARS coronavirus (SARS-CoV) replication by blocking viral entry ( $EC_{50}=6.7\mu\text{M}$ ). SSAA09E1 was discovered by screening a chemical library for blocking of entry of HIV-1 pseudotyped with SARS-CoV surface glycoprotein S. The compound acts via inhibition of cathepsin L ( $IC_{50}=5.33\mu\text{M}$ ), a host protease required for processing of SARS-S during viral entry. Cathepsin B is not inhibited.<sup>1</sup> The compound was also shown to inhibit tyrosinase ( $IC_{50}=0.14\mu\text{M}$ ).<sup>2</sup>

- 1) Adedeji *et al.*, (2013) *Novel inhibitors of severe acute respiratory syndrome coronavirus entry that act by three distinct mechanisms*; J. Virol. **87** 8017
- 2) Liu *et al.*, (2008) *1-(1-Arylethylidene)thiosemicarbazide derivatives: a new class of tyrosinase inhibitors*; Bioorg. Med. Chem. **16** 1096

**PHYSICAL DATA**

Molecular Weight:	199.29
Molecular Formula:	$C_7H_9N_3S_2$
Purity:	>98% by TLC
	NMR: (Conforms)
Solubility:	DMSO (10 mg/ml), or ethanol (10 mg/ml with warming)
Physical Description:	Beige solid
Storage and Stability:	Store as supplied at $-20^\circ\text{C}$ for up to 2 years from the date of purchase. Solutions in DMSO or ethanol may be stored at $-20^\circ\text{C}$ for up to 1 month.

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