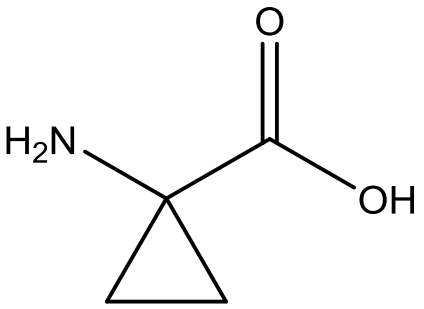
A1180
1-Aminocyclopropanecarboxylic acid (ACC)

Synonyms:	1-Aminocyclopropane-1-carboxylic Acid; ACPC; ACC
CAS:	22059-21-8
Formula:	$C_4H_7NO_2$
MW:	101.10 g/mol



Properties:

Form:	Powder
Appearance:	White-off-white
Application:	Plant Defense and Immunity
Solubility:	Soluble in Water, DMSO
Storage Temp:	Room Temperature
Stock Solution Storage Temp:	-20°C
Typical Working Concentration:	Varies by application. Concentration should be determined by end user.

Application Notes:

ACC is the key intermediate between methionine and ethylene production in plants (Adams and Yang, 1979). It is generally associated with the wounding process production of ethylene. It is known to be involved in ripening climacteric fruit, such as apple (Mansour *et al.* 1986).

References:

Adams DO, and Yang SF (1979) Ethylene biosynthesis: Identification of 1-aminocyclopropane-1-carboxylic acid as an intermediate in the conversion of methionine to ethylene. *PNAS* Vol 76(1):170-174

Mansour R, Latché A, Vaillant V, Pech JC, and MS Reid (1986) Metabolism of 1-Aminocyclopropane-1-carboxylic Acid in ripening apple fruits. *Physiologia Plantarum.* Vol. 66:495-502

***Phyto*Technology Laboratories®**
P.O. Box 12205; Shawnee Mission, KS 66282-2205
Phone: 1-888-749-8682 or 1-913-341-5343; Fax: 1-888-449-8682 or 1-913-341-5442
Web Site: www.phytotechlab.com