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Data Sheet

Product Name:	Azetidine-2-carboxylic acid	
Cat. No.:	CS-M0178	
CAS No.:	2517-04-6	
Molecular Formula:	C ₄ H ₇ NO ₂	
Molecular Weight:	101.10	
Target:	Others	N ``
Pathway:	Others	
Solubility:	H2O : 50 mg/mL (494.56 mM; Need ultrasonic)	H

BIOLOGICAL ACTIVITY:

Azetidine-2-carboxylic acid is a non proteinogenic amino acid homologue of proline. Found in common beets. Azetidine-2-carboxylic acid can be misincorporated into proteins in place of proline in many species, including humans. Toxic and teratogenic agent^{[1][2]}. *In Vitro:* Azetidine-2-carboxylic acid (375-500 μ g per day) is incorporated into the collagen synthesized by chick embryo cartilage *in vitro* ^[3].

References:

[1]. Rubenstein E, et al. Azetidine-2-carboxylic acid in the food chain. Phytochemistry. 2009 Jan;70(1):100-4.

[2]. Rubenstein E, et al. Misincorporation of the proline analog azetidine-2-carboxylic acid in the pathogenesis of multiple sclerosis: a hypothesis. J Neuropathol Exp Neurol. 2008 Nov;67(11):1035-40.

[3]. Lane JM, et al. Effect of the proline analogue azetidine-2-carboxylic acid on collagen synthesis in vivo. I. Arrest of collagen accumulation in growing chick embryos. Biochim Biophys Acta. 1971 Jun 29;236(3):517-27.

CAIndexNames:

2-Azetidinecarboxylic acid

SMILES:

O=C(O)C1NCC1

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

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