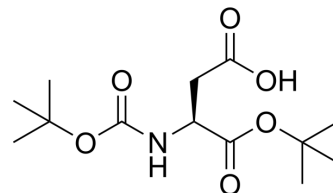


## (S)-4-(tert-Butoxy)-3-((tert-butoxycarbonyl)amino)-4-oxobutanoic acid

Cat. No.:	HY-W007573
CAS No.:	34582-32-6
Molecular Formula:	C <sub>13</sub> H <sub>23</sub> NO <sub>6</sub>
Molecular Weight:	289.32
Target:	Amino Acid Derivatives
Pathway:	Others
Storage:	Powder    -20°C    3 years 4°C        2 years In solvent   -80°C    6 months -20°C    1 month



### SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (345.64 mM; Need ultrasonic)					
	Preparing Stock Solutions	<div><div>Solvent</div><div>Concentration</div></div>	Mass	1 mg	5 mg	10 mg
		1 mM		3.4564 mL	17.2819 mL	34.5638 mL
		5 mM		0.6913 mL	3.4564 mL	6.9128 mL
		10 mM		0.3456 mL	1.7282 mL	3.4564 mL
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.5 mg/mL (8.64 mM); Suspended solution; Need ultrasonic					
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (8.64 mM); Clear solution					
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (8.64 mM); Clear solution					

### BIOLOGICAL ACTIVITY

Description	(S)-4-(tert-Butoxy)-3-((tert-butoxycarbonyl)amino)-4-oxobutanoic acid is an aspartic acid derivative <sup>[1]</sup> .
In Vitro	Amino acids and amino acid derivatives have been commercially used as ergogenic supplements. They influence the secretion of anabolic hormones, supply of fuel during exercise, mental performance during stress related tasks and prevent exercise induced muscle damage. They are recognized to be beneficial as ergogenic dietary substances <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[1]. Luckose F, et al. Effects of amino acid derivatives on physical, mental, and physiological activities. Crit Rev Food Sci Nutr. 2015;55(13):1793-1144.

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

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