## **Product** Data Sheet

## (S)-2-(tert-butoxycarbonylamino)-3-(4-carbamoyl-2,6-dimethylphenyl)propanoic acid

 Cat. No.:
 HY-79680

 CAS No.:
 623950-02-7

 Molecular Formula:
 C<sub>17</sub>H<sub>24</sub>N<sub>2</sub>O<sub>5</sub>

 Molecular Weight:
 336.38

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: 25 mg/mL (74.32 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.9728 mL	14.8641 mL	29.7283 mL
	5 mM	0.5946 mL	2.9728 mL	5.9457 mL
	10 mM	0.2973 mL	1.4864 mL	2.9728 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 (7.43 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- $\beta$ -CD in saline) Solubility: 2.5 mg/mL (7.43 mM); Suspended solution; Need ultrasonic
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.43 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description

(S)-2-(tert-butoxycarbonylamino)-3-(4-carbamoyl-2,6-dimethylphenyl)propanoic acid is a phenylalanine 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.

REFERENCES				
[1]. Luckose F, et al. Effects of amino	o acid derivatives on physica	al, mental, and physiological act	ivities. Crit Rev Food Sci Nutr. 20	15;55(13):1793-839.
Ca	aution: Product has not h	een fully validated for media	cal applications. For researcl	nuse only
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