Product Data Sheet

Argininosuccinic acid disodium

Cat. No.: HY-113149A
CAS No.: 918149-29-8
Molecular Formula: $C_{10}H_{16}N_4Na_2O_6$

Molecular Weight: 334.24

Target: Endogenous Metabolite; Reactive Oxygen Species

Pathway: Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κΒ

Storage: -20°C, sealed storage, away from moisture

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

BIOLOGICAL ACTIVITY

Description

Argininosuccinic acid disodium participates in the fourth step of the urea cycle and is cleaved into arginine and fumarate by argininosuccinate lyase (ASL). Argininosuccinic acid disodium reduces reduced glutathione (GSH) concentrations and increases reactive oxygen species production in the cerebral cortex and striatum. Argininosuccinic acid disodium causes lipid peroxidation and protein oxidation and also induces oxidative stress in the developing rat brain^{[1][2]}.

REFERENCES

[1]. Seminotti B, et al. Free Radical Scavengers Prevent Argininosuccinic Acid-Induced Oxidative Stress in the Brain of Developing Rats: a New Adjuvant Therapy for Argininosuccinate Lyase Deficiency? Mol Neurobiol. 2020 Feb;57(2):1233-1244.

[2]. Nagamani SCS, et al. GeneReviews® [Internet]. Seattle (WA): University of Washington, Seattle; 1993–2023.

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

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