

ALIVER

PRODUCT MONOGRAPH

Generic Name	Branched-Chain Amino Acids (L-Leucine + L-Valine + L-Isoleucine)
Trade Name(s)	Aliver
Manufacturer	Genuone Sciences Inc.
Source(s) of supply	Seoul Pharma Co., Ltd.
Pharmacologic classification	Amino Acids
Therapeutic indication	A food supplement for the improvement of hypoalbuminemia in patients w/ decompensated hepatic cirrhosis.
Dosage forms	Oral Liquid Suspension
Bioavailability and Pharmacokinetics	<i>(For Reference) Absorption, Distribution, Metabolism and Excretion in Rats:</i> The branched-chain amino acids administered to rats were rapidly absorbed, reaching a peak concentration in plasma and whole blood 4 hours after dosing, followed by a slow decline. The branched-chain amino acids in plasma were promptly utilized for protein synthesis. The branched-chain amino acids absorbed were distributed extensively to the whole body, conspicuously in those tissues actively involved in protein synthesis. During a 168-hour period after dosing, the branched-chain amino acids administered was excreted in urine and feces, and in expired breath, 4% and 41%, respectively. It indicated that the branched-chain amino acids administered were utilized in part as a source of energy. It was also demonstrated that their absorption, distribution and excretion were not significantly affected in repeat-dose studies). In hepatically impaired rats, absorption of the branched-chain amino acids administered proceeded slower than in normal rats, but their transition to plasma protein, distribution in tissues and excretion in urine and feces were essentially comparable with those seen in normal rats. It was thus indicated that the branched-chain amino acids administered were effectively utilized as substrates for protein synthesis in hepatically impaired rats as well. Compared with normal rats, the excretion in expired breath was greater in the hepatically impaired rats, in which the branched-chain amino acids administered were thus more efficiently utilized as a source of energy).
Dose range	Take one (1) sachet orally once a day after meals only. Not to be mixed with other beverages. Consult physician before use.

Known adverse effects and toxicities	1. Digestive Organs: Occasionally, constipation, diarrhea, bloating, abdominal discomfort, and vomiting may appear.			
	2. Kidney: Renal dysfunction such as BUN Increase can sometimes occur.			
	3. Metabolism: Sometimes metabolic disorders such as elevated blood ammonia levels can occur.			
	4. The adverse effects reported in pre and post marketing clinical trials and domestic and foreign post-marketing studies are as follows:			
	Particulars	0.1 to less than 5.0%	Less than 0.1%	Unknown frequency
	Digestive system	Abdominal distention, nausea, diarrhea, constipation, abdominal discomfort, stomach ache, vomiting, loss of appetite and solar plexus pain.	Thirst and belching	
	Kidney	Increase BUN, and increase of blood creatinine.		
	Metabolic disorder	Raised blood ammonia levels.		
Intestines	AST(GOT), ALT(GPT), and Increase in Bilirubin.			
Skin	Rash, Pruritus and etc.			
Etc.	Boredom, edema (Face, Legs and etc.)		Flare and Hot flush	
Special precautions	For adult use only. Not intended for children, pregnant & lactating women and those who have congenital branched-chain amino acid metabolic abnormality. (The use of this product may induce convulsion or respiratory disturbances in patients with maple syrup urine disease.)			
	Phenylketonurics: Contains Phenylalanine			