

- Food
- Food Additive
- Cosmetic
- Quasi-drug



Hokkaido Salmon

『 Anserine (Imidazole Dipeptide) 』

Patent Technology

GMP

Technical Data

Less Odor Product with Patent Technology



Extracting anserine from salmon meat of Hokkaido. Less odor product is made with special patented extraction method.

The secret that migratory birds and migratory fish can keep exercising forever is imidazole dipeptide in muscle. An amino acid with an imidazole group is also called histidine and imidazole dipeptide is a combination of it. Carnosine which is common in birds and mammals, anserine in many fishes, and barenin in many whales, are well-known examples of imidazole dipeptide.

Salmon of other origin may be used for the ingredient since a poor catch of salmon occurs in recent years.

Expected Function & Recommended Dosage

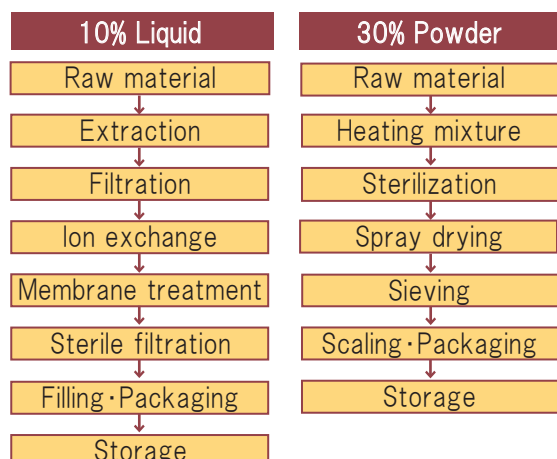
	As Anserine	
Antifatigue	200~400	
Removing active oxygen	200~400	
Antiaging	200~400	
Improving physical fitness	200~400 (mg/day)	
	As Product 10% Liquid	As Product 30% Powder
Antifatigue	2,000~4,000	700~1,400
Removing active oxygen	2,000~4,000	700~1,400
Antiaging	2,000~4,000	700~1,400
Improving physical fitness	2,000~4,000	700~1,400

◎ Preventing lifestyle related disease

Uses

- ◎ Supplements
- ◎ Drinks
- ◎ Foods & Drinks for Athlete

Production Process



Display Name Example

10% Liquid	30% Powder
Salmon Extract	Dextrin, Salmon Extract

Quality Standard Composition

	10% Liquid	30% Powder
Material	Salmon Extract	Dextrin, Salmon Extract
Property	Light yellow liquid with slight seafood flavor & salty taste	Light yellow powder with slight bitter taste
Imidazole dipeptide	Over 10%	Over 30%
Viable count of bacteria	1,000 pcs/g	1,000 pcs/g
Coliforms	Negative	Negative

Chemical Analysis Value (/100g)

	10% Liquid	30% Powder	
Energy	56	390	kcal
Moisture	85.7	1.9	g
Protein	11.8	35.5	g
Fat	0.0	0.0	g
Carbohydrate	2.3	62.0	g
Ash	0.2	0.6	g
Salt equivalent	0.4	1.0	g

*Numbers are just analysis example.
It does not guarantee the content of the product.

Other

	10% Liquid	30% Powder
Quantity	1kg, 15kg	500g, 10kg
Shelf life	3 years from the production date	
Storage condition	Keep in freezer	Keep at room temperature

Company Information

Ver.2304

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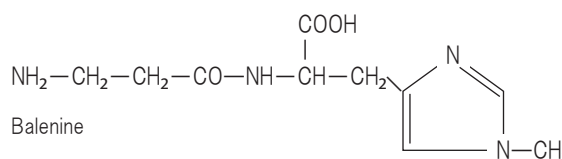
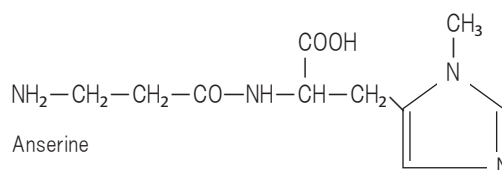
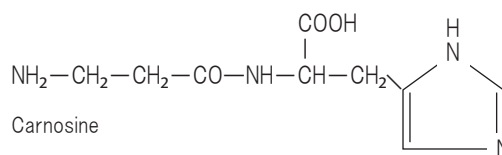
■ Distribution of imidazole dipeptide in animals

Anserine and balenine are methyl groups added in the process of carnosine metabolism, and it is thought that the amount of production will change depending on the physiological change of the animal and the ecological environment.

HCDP Distribution in The Body of Animals

Type of Animal	Carnosine	Anserine	Balenine
	(μ mol/g)		
Human	30.0	1.0	0.0
Pig	12.0	0.7	0.8
Cow	15.0	2.0	0.1
Horse	18.0	0.2	0.0
Sheep	5.0	5.0	0.0
Rabbit	2.0	19.0	0.0
Whale	10.0	0.0	30.0
Snake	5.0	0.0	10.0
Chicken	6.0	18.0	0.0
Tuna	0.0	30.0	0.0
Salmon	0.0	25.0	0.0

P.R. Carnegie, et al. J. Chromatog. 261:153(1983)
K. Teahon, et al. Biomed. Chromatog. 6:16-19(1992)
H. Abe, Kagaku To Seibutsu 23:809(1985)



■ The secret of migrant fish to keep swimming without rest

Anserine is strong antioxidant that promotes neutralization of lactic acid. It prevents accumulation of fatigue, so as exercise capacity improves. It also suppresses the production of uric acid, which is a waste product in the body, and promotes discharge the uric acid from the body.

■ Product with less odor

By the patent manufacturing method combining membrane processing technology and ion exchange technology, we produce it as a high purity product with less odor. The fact that purity is high means that there are no unnecessary ingredients other than imidazole dipeptides, so everyone can use it with confidence.

Company Information