# Klean Plant-Based Protein

**Natural Vanilla Flavor** 

#### DESCRIPTION

Klean Plant-Based Protein by Klean Athlete<sup>®</sup> supplies a blend of pea and organic brown rice protein to provide amino acids for muscle protein synthesis. The special features in this formula include ProHydrolase<sup>®</sup> enzymes to break down protein for increased amino acid absorption and to ease digestion, along with Sunfiber<sup>®</sup> for gastrointestinal health.<sup>‡</sup>

Klean Plant-Based Protein is tested and certified by the NSF Certified for Sport<sup>®</sup> Program, which was created to meet the growing demands of athletes, coaches and healthcare professionals to certify that sports supplements are safe and completely free from banned substances. Every product that carries the NSF<sup>®</sup> mark has undergone stringent laboratory testing to confirm content, purity and compliance.

## **INDICATIONS**

- Support for muscle protein synthesis<sup>‡</sup>
- Support for proper digestion and utilization of protein with ProHydrolase®‡
- Supports gastrointestinal health<sup>‡</sup>

# FUNCTIONS AND MECHANISM OF ACTION

Plant-based protein supplies essential amino acids, including branched-chain amino acids that participate in many of the body's metabolic and physiologic systems. Protein turnover in the body is continuous and can be substantial. The rebuilding of skeletal muscle that is broken down during exercise is critically important to athletes. The dynamics of this constant degradation and re-synthesis demand a daily supply of dietary protein and their constituent amino acids. Essential or indispensable dietary amino acids must be supplied by the diet, as they are not synthesized by the body. Research shows that protein and essential amino acids ingested after exercise stimulate muscle protein synthesis. Plant sources such as pea and rice can be an alternative protein source to dairy protein with similar benefits to muscle mass, thickness and strength. Athletes competing in strength training or endurance sports may require significantly more total protein from food and supplements combined, typically in ranges of 1.5-2.0 g protein/kg of body weight. <sup>‡</sup>

Digestive enzymes support proper digestion and utilization of protein. ProHydrolase<sup>®</sup> is a blend of protease enzymes designed to break down protein quickly and efficiently into an easily absorbed form to maximize performance benefits of amino acids. In an *in vitro* study, the enzymes in ProHydrolase<sup>®</sup> demonstrated the ability to break down the rice and pea proteins in Klean Athlete® Plant Protein. Within 60 minutes, over 80% of the proteins were degraded to smaller peptides. At time 0, the protein sizes ranged from 10-100 kDa and within 90 minutes almost 90% of the protein sizes were less than 25 kDa. Smaller proteins and peptides tend to be more quickly and easily absorbed in the intestinal tract and cause less digestive discomfort.<sup>‡</sup>

Sunfiber<sup>®</sup> research has shown that as a prebiotic fiber, hydrolyzed guar gum can increase both beneficial Bifidobacteria and Lactobacillus species in the colon, supporting a healthy gut microbiota. Sunfiber<sup>®</sup> also helps moderate the glycemic index and post-prandial hunger by supporting the feeling of satiety. Hydrolyzed guar gum is well-tolerated and may not cause osmotic diarrhea due to its large molecular weight which balances the absorption of fluid in the colon. Studies also show that motility, frequency and consistency of stool is supported with daily consumption.<sup>‡</sup>

## FORMULA (#KA57724P-720)

Serving Size 1 Scoop (approx. 36 g)

Calories	130
Total Fat	1.5 g
Total Carbohydrate	11 g
Dietary Fiber	
Total Sugars	5 g
Includes 4 g Added Sugars	
Protein	20 g
Sodium (naturally occurring)	.310 mg
Iron	5.2 mg
Sunfiber <sup>®</sup> (partially hydrolyzed guar gum)	2.5 g
ProHydrolase <sup>®</sup>	200 mg
(protease digestive enzyme blend providing 70,000 HUT)	

Other ingredients: Plant-based protein blend (pea protein isolate, organic brown rice protein), organic cane sugar, natural flavors, guar gum, stevia leaf extract (Rebaudioside A), and monk fruit extract

May contain trace amounts of soy due to agricultural practices Non-GMO

Sunfiber<sup>®</sup> is a registered trademark of Taiyo International, Inc. ProHydrolase<sup>®</sup> is a trademark of Deerland Probiotics & Enzymes, Inc.

## SUGGESTED USE

As a dietary supplement, take 1 scoop daily mixed with 10-12 ounces of water or other beverage, or as directed by a trainer, coach or health professional.

#### WARNING

If you are pregnant, nursing, have any health condition or taking any medication, consult your health professional before using this product.

#### STORAGE

Store in a cool, dry place, away from direct light. Keep out of reach of children.

#### REFERENCES

Lemon, PW. J Am Coll Nutr 2000;19:513S-521S. Børsheim,et al. Am J Physiol Endocrinol Metab 283: E648–E657, 2002; Tipton KD. Proc Nutr Soc. 2011 May;70(2):205-14. Epub 2011 Mar 7. Review. Slater G, Phillips SM. J Sports Sci. 2011;29 Suppl 1:S67-77. Babualt, N. et al.Journal of the International Society of Sports Nutrition (2015) 12:3 Joy, J. et al. Nutrition Journal 2013, 12:86 Koopman, R. Am J Clin Nutr. 90[1], 106-15. 2009 Kapoor, et al. *J of Functional Foods*, 33 (2017) 52-66. Giannini, E, et al. *Nutrition.* 22, pp334-342, 2006.

#### For more information on Klean Plant Protein, visit kleanathlete.com

<sup>‡</sup>These statements have not been evaluated by the Food and Drug Administration. This product is not intended to diagnose, treat, cure, or prevent any disease.

Manufactured for: Klean Athlete<sup>®</sup> 112 Technology Drive Pittsburgh, PA 15275 855-255-5326 kleanathlete.com





Typical Amino Acid Profile Glutamic acid Aspartate Leucine	
Tryptophan	175 mg