



Digest-ProGD® HP

Digestive Enzymes

- Provides fungal and bacterial proteases to hydrolyze difficult-to-digest proline-containing peptides such as gluten and casein
- Provides wide spectrum carbohydrate digestion with plant-based papain, bromelain, and fungal digestive enzymes
- High potency formulation allows for easy dosing, with nearly 300 mg enzyme blend delivered in each vegetarian capsule
- Completely suitable for vegetarians and vegans

Code: 9503 **NPN:** 80072201
Size: 60 Vegetarian Capsules
Actual Size: 19.4 mm x 5.9 mm



PRODUCT SUMMARY

Digest-ProGD® HP is a high potency proprietary enzyme blend, providing fungal proteases derived from *Aspergillus oryzae*, bacterial protease derived from *Bacillus subtilis*, as well as comprehensive carbohydrate digestive support from papain, bromelain, and fungal digestive enzymes. *Aspergillus oryzae* extracts are rich in prolyl endopeptidases as well as dipeptidyl peptidase IV (DPP-IV) – a multifunctional serine protease which targets proline containing peptides, such as those found in both gliadin and casein, both proteolytically resistant proteins.¹⁻³

Indeed, protease activity from *Aspergillus oryzae* targets the proline-rich 33-mer of gliadin, perhaps the most immunotoxic peptide derived from gliadin.⁴ The antigenic and immunomodulatory proline-rich proteins found in gluten are thought to trigger an inflammatory response in patients with either celiac disease or gluten sensitivity, often due to inadvertent gluten exposure, even for those on a gluten free diet.⁵ Supplementation with protease from *Aspergillus oryzae* has also been linked to a bifidogenic effect in animals, suggesting a potential probiotic effect.⁶

In addition to fungal and bacterial proteases, Digest-ProGD® HP provides alpha-amylase, cellulase, and hemicellulase activity for comprehensive carbohydrate digestion support.



DIGEST-PROGD® HP DIGESTIVE ENZYMES

Serving Size: 1 capsules

Servings per Container: 60

Each Vegetarian Capsule Contains:

Proprietary Enzyme Blend.....	295 mg
Fungal Protease (<i>Aspergillus flavus</i> var. <i>oryzae</i>) (whole).....	153.35 mg (690 FCC SAP)
Bacterial Protease (<i>Bacillus subtilis</i>) (whole)	75 mg (75,000 FCC PC)
Fungal Protease (<i>Aspergillus flavus</i> var. <i>oryzae</i>) (whole).....	24.36 mg (6,700 FCC HUT)
Alpha-Amylase (<i>Aspergillus flavus</i> var. <i>oryzae</i>) (whole).....	18.67 mg (2,800 FCC DU)
Bromelain (<i>Ananas comosus</i> var. <i>comosus</i>) (stem).....	9.55 mg (315,000 FCC PU)
Papain (<i>Carica papaya</i>) (fruit)	7.5 mg (315,000 FCC PU)
Cellulase (<i>Trichoderma longibrachiatum</i>) (whole)	3.78 mg (680 FCC CU)
Hemicellulase (<i>Aspergillus niger</i>) (whole)	2.34 mg (1,875 FCC HCU)

FCC: Food Chemical Codex, SAP: Spectrophotometric Acid Protease Unit, PC: Protease Unit, HUT: Hemoglobin Unit on the Tyrosine Basis, DU: Dextrinizing Unit, PU: Papain Unit, CU: Cellulase Unit, HCU: Hemicellulase Unit

Non-medicinal Ingredients: Vegetarian capsule (carbohydrate gum [cellulose], purified water), microcrystalline cellulose, vegetable grade magnesium stearate (lubricant).

Recommended Adult Dose: 1 capsule 3 times per day with meals or as directed by a health care practitioner.

Recommended Use: Digest-ProGD® HP is a comprehensive, proprietary enzyme blend that supports the digestion of foods containing gluten proteins, as well as broad-spectrum carbohydrate support. Those with celiac disease should still avoid their allergenic foods.

Contraindications: Consult a health care practitioner prior to use if you have diabetes, a gastrointestinal lesion, ulcer, are taking an anticoagulant, blood thinner, anti-inflammatory, antibiotic, or are having surgery, are pregnant or breastfeeding, or have allergy to latex or fruits (avocado, banana, chestnut, passion fruit, fig, melon, mango, kiwi, pineapple, peach, tomato).

Drug Interactions: No known drug interactions.

Contains no artificial colours, preservatives, or sweeteners; no dairy, sugar, wheat, gluten, yeast, soy, egg, fish, shellfish, animal products, salt, tree nuts, or GMOs. Suitable for vegetarians/vegans. Sealed for your protection.

Do not use if seal is broken. For freshness, store in a cool, dry place.

References

- Mulvihill EE, Drucker DJ. Pharmacology, physiology, and mechanisms of action of dipeptidyl peptidase-4 inhibitors. *Endocr Rev.* 2014 Dec;35(6):992-1019. doi: 10.1210/er.2014-1035.
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- Lambeir AM, Durinx C, Scharpé S, De Meester I. Dipeptidyl-peptidase IV from bench to bedside: an update on structural properties, functions, and clinical aspects of the enzyme DPP IV. *Crit Rev Clin Lab Sci.* 2003 Jun;40(3):209-94.
- Eugster PJ, Salamin K, Grouzmann E, et al. Production and characterization of two major *Aspergillus oryzae* secreted prolyl endopeptidases able to efficiently digest proline-rich peptides of gliadin. *Microbiology.* 2015 Dec;161(12):2277-88.
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- Yang Y, Iwamoto A, Kumrungsee T, et al. Consumption of an acid protease derived from *Aspergillus oryzae* causes bifidogenic effect in rats. *Nutr Res.* 2017 Aug;44:60-66.



· GUARANTEED ·

Bioclinic Naturals® products are guaranteed to meet or exceed Good Manufacturing Practices (GMP) of the U.S. Food and Drug Administration (FDA), Health Canada, and the Therapeutic Goods Administration (TGA) of Australia.



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