

PlantPro™ 502L

PP502L

Features/Benefits

- To be used in combination with PlantPro™ 726L for umami flavour generation in plant-based proteins.

PlantPro™ 502L is an optimised endopeptidase developed specifically to be used in combination with PlantPro™ 726L to optimise glutamate release from plant-based protein substrates. The distinct activities in PlantPro™ 502L when used in combination with PlantPro™ 726L generate unique umami and savoury flavour profiles.

Specification

Activity	Casein Protease >70 U/g
Biological Source	Microbial
Appearance	Light to dark brown liquid
Application pH Range	5.5 - 7.5
Application Temperature Range	45 - 65°C
Deactivation Conditions	85°C for 15 minutes

Application & Dose

The optimum dosage of PlantPro™ 502L combined with PlantPro™ 726L will depend on the protein substrate and level of modification required. A temperature of 50 – 60°C and pH of 5.5 – 7.5 are recommended for optimal hydrolysis. As an initial dosing guide for generating umami flavours with plant substrates, PlantPro™ 502MDP can be used at a dose of 0.3 – 0.5% w/w protein content with PlantPro™ 726L at a dose of 0.6 - 0.8% w/w protein content of. A typical incubation time may be in the range of 4 – 24 hours. It is recommended that optimisation trials are then performed in order to determine the exact conditions to achieve the desired effect. Please contact Biocatalysts Ltd for further technical support. We offer a comprehensive technical application service partnering with you to test our enzymes with your substrates to help you achieve optimal performance, efficiency, and quality in your products.

Health & Safety

Always read the Material Safety Datasheet (MSDS) before use and retain. If you are in any doubt about recommended product handling and safety, please contact Biocatalysts before use. Generally, when using enzymes avoid contact with the skin and eyes and do not breathe dusts or aerosols containing them.

Storage

Liquids: Activity will remain within specification for at least 6 months from the date of manufacture when stored at 0 - 8°C.

Allergens

Refer to allergen statement.

Food Status

Prepared from enzymes of GRAS status and manufactured to FCC/JECFA/WHO/FAO recommendations for enzymes used in food processing.

Availability

Liquids: standard 25kg net plastic jerry cans.

GM Status

This product has been manufactured using a fermentation process of a microbial organism that has not been altered using modern biotechnology. This product does therefore not require labelling as GMO on food labels.

Quality

1. Food Safety Policy - The Company operates a Hazard Analysis at Critical Control Points (HACCP) system. This ensures that ingredients and the production environment are regularly monitored for contamination and that the processes are designed to produce safe products every time.
2. Good Manufacturing Practice (GMP) - The Company's integrated management system encompasses Total Quality, Health and Safety, Food Safety and GMP.
3. Biocatalysts Ltd is certified to ISO9001, ISO14001, ISO18001 and FSSC 22000