Creative Enzymes®

proteasome endopeptidase complex

Cat. No. EXWM-4374

Lot. No. (See product label)

Introduction

Description A 20-S protein composed of 28 subunits arranged in four rings of seven. The outer rings are composed of α subunits, but the β subunits forming the inner rings are responsible for peptidase activity. In eukaryotic organisms there are up to seven different types of β subunits, three of which may carry the N-terminal threonine residues that are the nucleophiles in catalysis, and show different specificities. The molecule is barrel-shaped, and the active sites are on the inner surfaces. Terminal apertures restrict access of substrates to the active sites. There is evidence that catalytic subunits are replaced by others under some conditions so as to alter the specificity of proteolysis, perhaps optimizing it for the formation of antigenic peptides. A complex of the 20-S proteasome endopeptidase complex with a 19-S regulatory unit is the 26-S proteasome that degrades ubiquitin-protein conjugates. Type example of peptidase family T1.

Synonyms ingensin; macropain; multicatalytic endopeptidase complex; prosome; multicatalytic proteinase (complex); MCP; proteasome; large multicatalytic protease; multicatalytic proteinase; proteasome organelle; alkaline protease; 26S protease; tricorn proteinase; tricorn protease

Product Information

Form Liquid or lyophilized powder

EC Number EC 3.4.25.1

CAS No. 140879-24-9

Reaction Cleavage of peptide bonds with very broad specificity

Notes This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.