

Native Human Proteasome 19S Protein, Tag Free

Cat. No. Proteasome 19S-39H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Purified from human blood cells by fractination. The highest activity, soluble and homogenous.
Species	Human
Source	Blood cell
Description	It is responsible for intracellular protein turnover and it is also critically involved in many regulatory processes and, in higher eukaryotes, in antigen processing. The 26S proteasome is the key enzyme of the ubiquitin/ATP-dependent pathway of protein degradation. The catalytic core of this unusually large (2000kDa, 450Å in length) complex is formed by the 20S proteasome, a barrel-shaped structure shown by electron microscopy to comprise of four rings each containing seven subunits. Based on sequence similarity, all fourteen 20S proteasomal subunit sequences may be classified into two groups, alpha, and beta, each group having distinct structural and functional roles. The alpha-subunits comprise the outer rings and the beta-subunits the inner rings of the 20S proteasome. Observations of the eukaryotic proteasome and analysis of subunit sequences indicate that each ring contains seven different subunits (alpha7-beta7-beta7-alpha7) with a member of each sub-family represented in each particle. Each subunit is located in a unique position within the alpha- or beta-rings. In addition to the 20S particle, the 26S complex contains over twenty additional proteins, ranging in molecular weight from 25 to 10kDa, located in a distinct complex called the 'PA700 proteasome activator' or the '19S complex', and which determines substrate specificity and provides the multiple enzymatic functions necessary for

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA

proteolysis and viability. Systematic analysis of the sub-unit components have revealed at least six members to be ATPases belonging to a new family of ATP-binding proteins, together with a further fifteen sub-units that lack the capacity to bind ATP, isopeptidases and several other proteins thought to be responsible for the unfolding of a protein substrate prior to insertion into the proteolytic core of the 20S proteasome.

Tag	Non
------------	-----

GENE INFORMATION

Official Symbol	Proteasome 19S
------------------------	----------------

Synonyms	Proteasome 19S; 29S
-----------------	---------------------

 Tel: 1-631-559-9269 1-516-512-3133

 Email: info@creative-biomart.com  Fax: 1-631-938-8127

 45-1 Ramsey Road, Shirley, NY 11967, USA