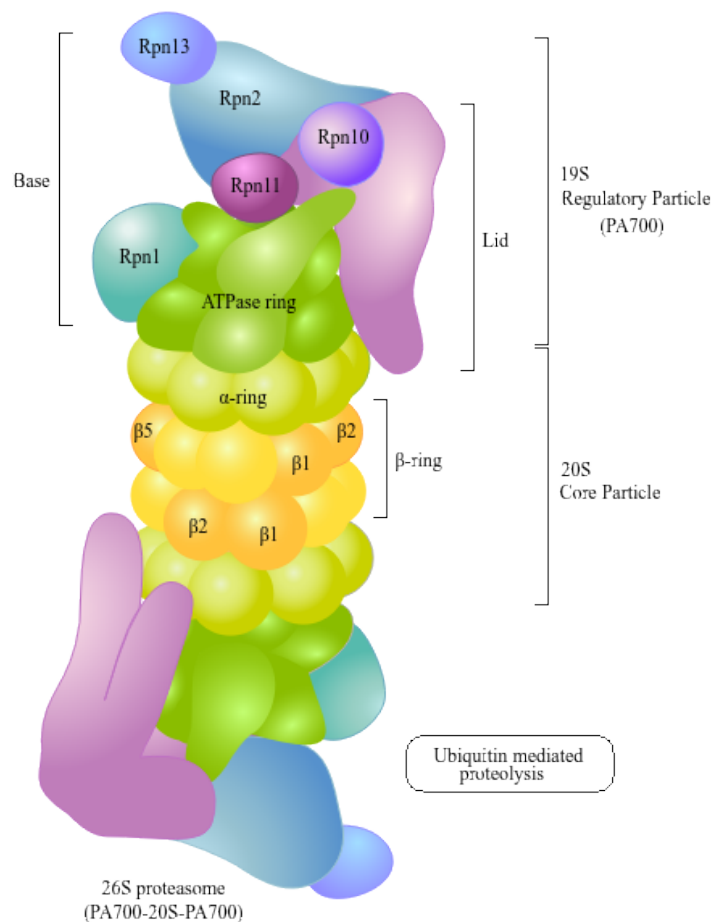


PROTEASOME



Regulatory Particles

PA700 (Lid)

Rpn3	Rpn4	Rpn5	Rpn6	Rpn7
Rpn8	Rpn9	Rpn11	Rpn12	Rpn15

Rpn10

PA700 (Base)

Rpn1	Rpn2	Rpn13			
Rpn1	Rpn2	Rpn6	Rpn4	Rpn5	Rpn3

Bacterial regulatory subunit (AAA ATPase forming ring-like complex)

ARC

PA28- $\alpha\beta$ (hetero hexamer or heptamer)

PA28 α PA28 β

PA28- γ (homo hexamer)

PA28 γ

PA200

PA200

Archaeal regulatory subunit (oligomeric complex)

PAN

Core Particles (20S proteasome)

Standard proteasome subunits

α 1	α 2	α 3	α 4	α 5	α 6	α 7
β 1	β 2	β 3	β 4	β 5	β 6	β 7

Immunoproteasome subunits

β 1i β 2i β 5i

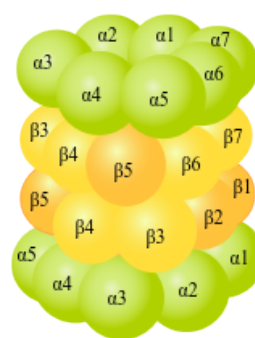
Thymoproteasome subunits

β 5t

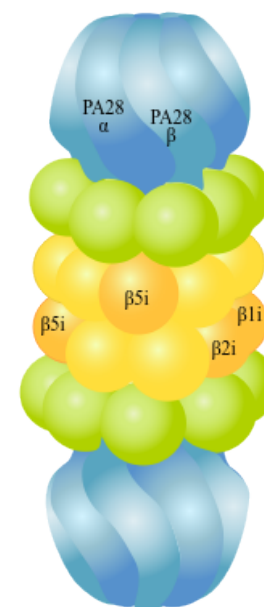
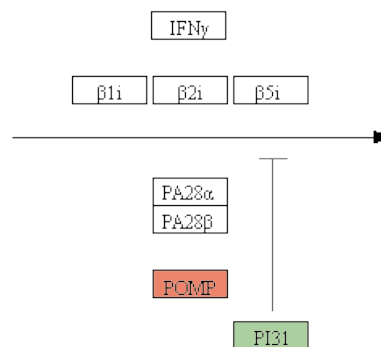
Prokaryotic 20S subunits

α
 β

Formation of immunoproteasomes



Standard 20S proteasome



Immunoproteasome

Regulatory Particle (PA28- $\alpha\beta$)

Immuno 20S proteasome

Regulatory Particle (PA28- $\alpha\beta$)