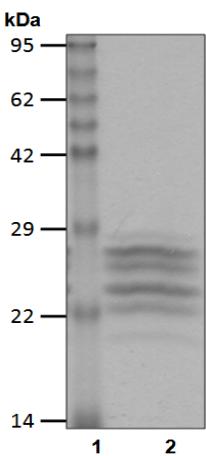


# Bovine immuno 20S proteasome

Cat. # A1500, A1501

<b>Also Known as:</b>	Immuno 20S proteasome
<b>NCBI Reference:</b>	N/A
<b>MW (no tag):</b>	700 kDa
<b>Species:</b>	Bovine
<b>Source:</b>	Bovine red blood cells
<b>Tag:</b>	No
<b>Stock Buffer:</b>	20 mM Tris, 20 mM NaCl, 1 mM EDTA, 5 mM βME, 10% Glycerol
<b>Concentration:</b>	See tube label
<b>Quality Assurance:</b>	~95% by native-PAGE

**Image**

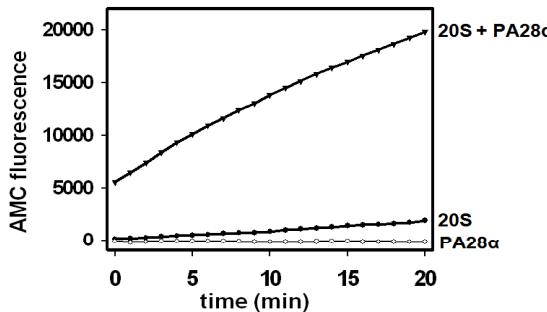


Coomassie-stained SDS-PAGE  
Lane 1: Molecular weight markers  
Lane 2: 5 µg purified Bovine immuno 20S proteasome

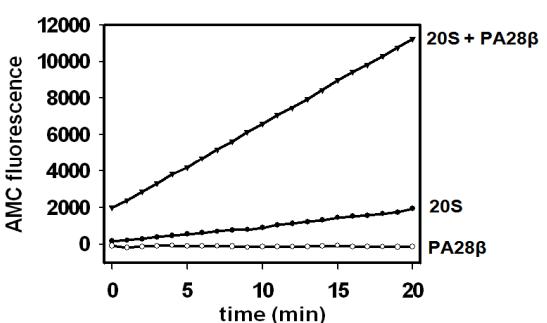


Coomassie-stained native-PAGE  
Lane 1: 5 µg purified Bovine immuno 20S proteasome

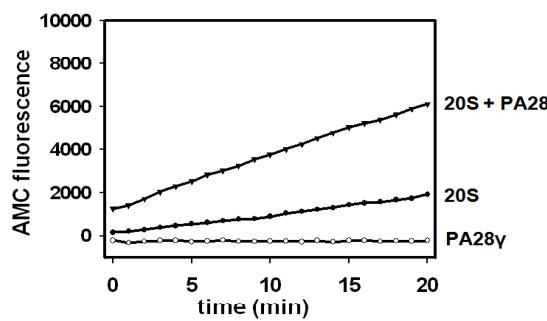




Activation of 5 nM immuno 20S proteasome (Cat. # A1500) by 25 nM PA28 $\alpha$  (Cat. # A2100), the proteasome activity was assayed by using 50  $\mu$ M Suc-LLVY-AMC (Cat. # G1100) as the substrate. The AMC fluorescence was monitored by a plate reader with excitation and emission filters of 360 $\pm$ 40 nm and 460 $\pm$ 30 nm, respectively.



Activation of 5 nM immuno 20S proteasome (Cat. # A1500) by 25 nM PA28 $\beta$  (Cat. # A2200), the proteasome activity was assayed by using 50  $\mu$ M Suc-LLVY-AMC (Cat. # G1100) as the substrate. The AMC fluorescence was monitored by a plate reader with excitation and emission filters of 360 $\pm$ 40 nm and 460 $\pm$ 30 nm, respectively.



Activation of 5 nM immuno 20S proteasome (Cat. # A1500) by 25 nM PA28 $\gamma$  (Cat. # A2300), the proteasome activity was assayed by using 50  $\mu$ M Suc-LLVY-AMC (Cat. # G1100) as the substrate. The AMC fluorescence was monitored by a plate reader with excitation and emission filters of 360 $\pm$ 40 nm and 460 $\pm$ 30 nm, respectively.

**Description:**

Upon stimulation with IFN –  $\gamma$ , the expression of the three catalytic  $\beta$  subunits  $\beta 1$ ,  $\beta 2$ , and  $\beta 5$  with iso-forms  $\beta 1i$  (LMP2),  $\beta 2i$  (MECL – 1), and  $\beta 5i$  (LMP7) are induced, respectively. These subunits are incorporated into the 20S proteasome to form the immune 20S proteasome. It was reported that the immunoproteasome has altered proteolytic activities compared to its normal form, which favor the generation of immunopeptides for antigen presentation.

**Storage:**

Store at -80°C; avoid multiple freeze-thaw cycles

**Note:**

N/A

**Literature:**

1. Goldberg AL, *et al.* (1992) Nature 357(6377), 375 – 379.
2. Aki M, *et al.* (1994) J Biochem 115(2), 257 – 269.
3. Tanaka K (1994) J Leukoc Biol 56(5), 571 – 575.
4. Zaiss DM, *et al.* (2011) J Immunol 187(5), 2302 – 2309.

