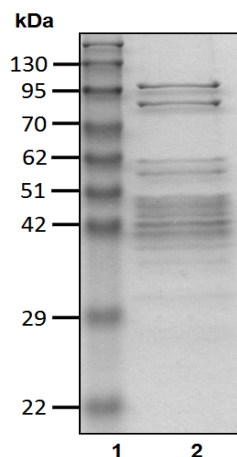


Bovine 19S (PA700)

Cat. # A1300, A1301

Also Known as: PA700
NCBI Reference: N/A
MW (no tag): 900 kDa
Species: Bovine
Source: Bovine red blood cells
Tag: No
Stock Buffer: 20 mM Tris, 20 mM NaCl, 1 mM EDTA, 5 mM β ME, 10% Glycerol
Concentration: See tube label
Quality Assurance: At least 90% by native-PAGE

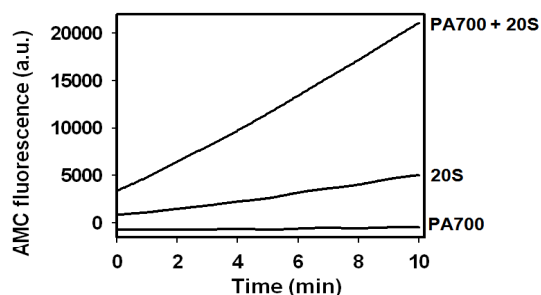
Image



Coomassie-stained SDS-PAGE
 Lane 1: Molecular weight markers
 Lane 2: 5 μ g purified Bovine 19S (PA700)



Coomassie-stained native-PAGE
 Lane 1: 5 μ g purified Bovine 19S (PA700)



Activation of 5 nM 20S proteasome (Cat. # A1400) by 25 nM PA700 (Cat. # A1300), the proteasome activity was assayed by using 50 μ 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 ± 40 nm and 460 ± 30 nm, respectively.

Description:

The 19S regulatory particle (PA700) locates on either one or both ends of the 20S core particle of the 26S proteasome. It has 19 subunits including six AAA ATPases that associate with α subunits of the 20S proteasome to form the 26S proteasome. PA700 plays an essential role in preparing substrate proteins to be degraded by the 20S proteasome, including binding, deubiquitinating and unfolding polyubiquitinated proteins.

Storage:

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

Note:

N/A

Literature:

1. Waxman L, *et al.* (1987) J Biol Chem 262(6), 2451 – 2457.
2. Kanayama HO, *et al.* (1992) Eur J Biochem 206(2), 567 – 578.
3. Glickman MH, *et al.* (1998) Cell 94, 615 – 623.
4. Da Fonseca PC, *et al.* (2008) J Biol Chem 283, 23305 – 23314.
5. Kim HM, *et al.* (2011) Biochim Biophysica Acta 1809(2), 67 – 79.