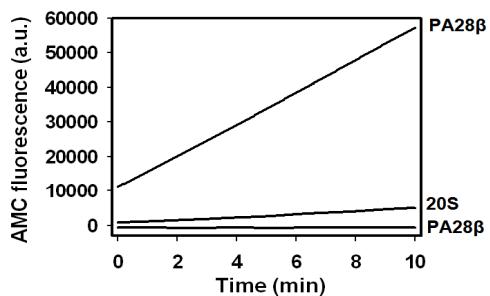
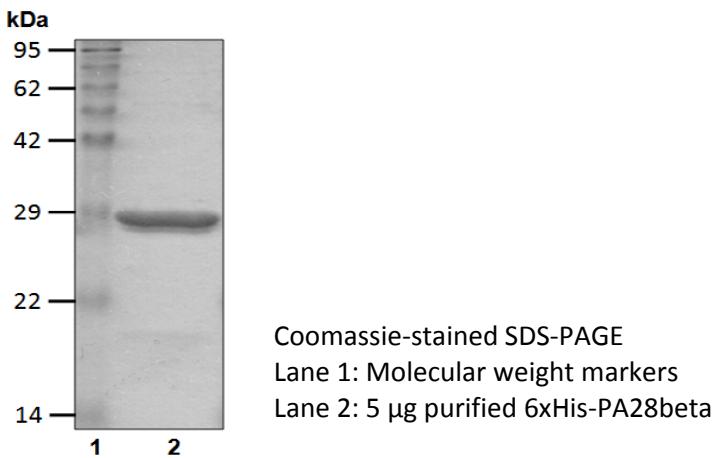


6xHis-PA28beta

Cat. # A2200, A2201

Also Known as:	PSME2;PA28B; REGbeta; PA28beta;PA28-beta;PA28 beta
NCBI Reference:	NM_002818
MW (no tag):	27.4 kDa
Species:	Human
Source:	Bacterial recombinant
Tag:	6xHis
Stock Buffer:	20 mM Tris, 150 mM NaCl, 2 mM β ME, 10% Glycerol
Concentration:	See tube label
Quality Assurance:	~95% by SDS-PAGE

Image



PA28 β + 20S Activation of 5 nM 20S proteasome (Cat. # A1400) by 25 nM PA28 β (Cat. # A2200), 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 \pm 40 nm and 460 \pm 30 nm, respectively.



Description:	PA28 (also called the 11S regulatory complex) is another activator of the 20S proteasome, which assembles on either one or both ends of the 20S proteasome in an ATP-independent manner. PA28 can greatly enhance the peptidase activities of the 20S proteasome, but not for degradation of ubiquitinated proteins. The PA28 activator is a complex of two alternating homologous subunits, PA28 α and PA28 β , which assembles as a hexameric ring with an $\alpha_3\beta_3$ stoichiometry. PA28 α and PA28 β are induced by interferon. Functionally, PA28 enhances the generation of class I peptides for antigen presentation. The third subunit, PA28 γ , was recently identified in the nucleus. Recombinant PA28 α and PA28 β form a heptomeric ring; whereas PA28 γ forms a hexameric ring. All of them can stimulate the peptidase activities of the 20S proteasome.
Storage:	Store at -80°C; avoid multiple freeze-thaw cycles
Note:	N/A
Literature:	<ol style="list-style-type: none">1. Ma CP, <i>et al.</i> (1992) J Biol Chem 267(15), 10515 – 10523.2. Whitby FG, <i>et al.</i> (2000) Nature 408(6808), 115 – 120.3. Cascio P, <i>et al.</i> (2002) The EMO Journal 21, 2636 – 2645.4. Sijts EJAM, <i>et al.</i> (2011) Cell Mol Life Sci 68(9), 1491 – 1502.

