

MATERIAL DATA SHEET**20S Proteasome, *rat*****Cat. # E-352**

The 20S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. This multi-subunit complex selectively degrades intracellular proteins. The 20S catalytic core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. This activity degrades a variety of peptide substrates and poly-ubiquitinated proteins with broad specificity in non-ATP dependent process. The 20S proteasome can be activated chemically by the addition of detergent or by the proteinaceous activator PA28. This product has been purified from rat erythrocytes.

Product Information

Quantity:	X µg
Stock:	X mg/ml in 50 mM HEPES pH 7.6, 150mM NaCl, 1mM DTT. Actual concentration will vary with specific Lot #.
MW:	700 kDa
Purity:	> 95% by SDS-PAGE

Use & Storage

Use:	Typical enzyme concentration for assay is 0.1-1 nM. 20S can be activated by SDS (0.035%) or with PA28 (Cat. # E-380).
Storage:	Store at -80°C. Avoid multiple freeze/thaw cycles.

Literature

References:	Coux O. (1996) <i>Ann. Rev. Biochem.</i> 65 :801-847 McCormack T.A., <i>et al.</i> (1998) <i>Biochem.</i> 37 :7792-7800 Ganoth D., <i>et al.</i> (1988) <i>J. Biol. Chem.</i> 263 :12412-12419 Hartman-Peterson R., <i>et al.</i> (2003) <i>Tren. Biochem. Sci.</i> 28 :26-31 Rechsteiner M., <i>et al.</i> (1993) <i>J. Biol. Chem.</i> 268 :6065-6068 Waxman L., <i>et al.</i> (1987) <i>J. Biol. Chem.</i> 262 :2451-2457 Voges D., <i>et al.</i> (1999) <i>Ann. Rev. Biochem.</i> 68 :1015-1068
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