## Human 20S proteasome (20SP) ELISA Kit

Catalog No: #EK11940



Package Size: #EK11940-1 48T #EK11940-2 96T

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Description	
Product Name	Human 20S proteasome (20SP) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5%
	within the expiration date under appropriate storage condition.
	The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days,
	and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China
	Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage
	at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

## **Application Details**

Detect Range:1.56-100 ng/mL
Sensitivity:0.66 ng/mL
Sample Type:Serum, Plasma, Other biological fluids
Sample Volume: 1-200 μL
Assay Time:1-4.5h
Detection wavelength:450 nm

## **Product Description**

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate 20SP in samples. An antibody specific for 20SP has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and any20SP present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for 20SP is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of 20SP bound in the initial step. The color development is stopped and the intensity of the color is measured. Product Overview: The number and diversity of subunits contained in the 20S core particle depends on the organism; the number of distinct and specialized subunits is larger in multicellular than unicellular organisms and larger in eukaryotes than in prokaryotes. All 20S particles consist of four stacked heptameric ring structures that are themselves composed of two different types of subunits;  $\alpha$  subunits are structural in nature, whereas  $\beta$  subunits are predominantly catalytic. The outer two rings in the stack consist of seven  $\alpha$  subunits each, which serve as docking domains for the regulatory particles and the alpha subunits N-termini form a gate that blocks unregulated access of substrates to the interior cavity. The inner two rings each consist of seven  $\beta$  subunits and contain the protease active sites that perform the proteolysis reactions. The size of the proteasome is relatively conserved and is about 150 angstroms (?) by 115?.

Note: This product is for in vitro research use only