## Human Peptidase inhibitor 16 (PI16) ELISA Kit

Catalog No: #EK8525

Package Size: #EK8525-1 48T #EK8525-2 96T



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## Description

Product Name	Human Peptidase inhibitor 16 (PI16) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	CRISP9; DKFZp586B1817; MGC45378; MSMBBP; PSPBP; PSP94-binding protein microseminoprotein;
	beta-binding protein protease inhibitor 16
Accession No.	Q6UXB8
Uniprot	Q6UXB8
GeneID	221476;
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:0.312-20 ng/mL	
Sensitivity:0.156 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 PI16 in samples. An antibody specific for PI16 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPI16 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for PI16 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 PI16 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:PI16 is a putative serine protease inhibitor. PI16 may serve as a marker following prostatectomy for prostate cancer. This protein binds with high affinity to PSP94.

PI16 expression is enhanced after serum stimulation of primary cardiomyocytes and is rapidly secreted into the conditioned medium of cardiomyocytes. PI16 is overexpressed in the hypertrophic and failing heart and inhibits cardiomyocyte growth. Suppression of endogenous PI16 expression in primary cardiomyocytes significantly enhances cardiomyocyte size. Transgenic mice overexpressing PI16 in a cardiomyocyte-specific manner show normal cardiac function but have smaller hearts with hypotrophic cardiomyocytes.

Note: This product is for in vitro research use only