

# Rat Transitional endoplasmic reticulum ATPase (VCP) ELISA Kit



Catalog No: #EK5889

Orders: order@signalwayantibody.com

Package Size: #EK5889-1 48T #EK5889-2 96T

Support: tech@signalwayantibody.com

## Description

Product Name	Rat Transitional endoplasmic reticulum ATPase (VCP) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat ( <i>Rattus norvegicus</i> )
Other Names	IBMPFD; MGC131997; MGC148092; MGC8560; TERA; p97; transitional endoplasmic reticulum ATPase yeast Cdc48p homolog
Accession No.	P46462
Uniprot	P46462
GeneID	116643;
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:0.115 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:**Sandwich Test principle:This assay employs a two-site sandwich ELISA to quantitate VCP in samples. An antibody specific for VCP has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyVCP present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for VCP 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 VCP bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**The deduced protein contains 1,236 amino acids. RT-PCR ELISA detected moderate VCPIP1 expression in all adult and fetal tissues examined.Reassembly of the Golgi apparatus from membrane fragments after cell division requires the ATPases NSF and p97 (VCP), as well as the cofactor p47 (NSFL1C) and the receptor syntaxin-5 (STX5A). rat Vcip135 was essential for p97/p47-mediated membrane fusion and that Vcip135 bound to the p97/p47/Stx5a complex and dissociated it via p97-catalyzed ATP hydrolysis. Microinjection of antibodies against Vcip135 and p47 in rat kidney cells showed that Vcip135 and p47 were required for Golgi and endoplasmic reticulum assembly.a cycle of ubiquitination and VCIP135-mediated deubiquitination regulates Golgi membrane dynamics during mitosis.

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Note: This product is for in vitro research use only