

Datasheet for ABIN1672839

Clusterin ELISA Kit



[Go to Product page](#)

1 Image

Overview

Quantity:	96 tests
Target:	Clusterin (CLU)
Binding Specificity:	AA 22-226, AA 227-448
Reactivity:	Mouse
Method Type:	Sandwich ELISA
Detection Range:	312-20000 pg/mL
Minimum Detection Limit:	312 pg/mL
Application:	ELISA

Product Details

Purpose:	Sandwich High Sensitivity ELISA kit for Quantitative Detection of Mouse Clusterin
Brand:	PicoKine™
Sample Type:	Cell Culture Supernatant, Serum, Plasma (heparin), Plasma (EDTA)
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Immunogen:	Expression system for standard: NSO Immunogen sequence: D22-R226(beta)&S227-E448(alpha)
Specificity:	Expression system for standard: NSO Immunogen sequence: D22-R226(beta)&S227-E448(alpha)
Cross-Reactivity (Details):	There is no detectable cross-reactivity with other relevant proteins.

Product Details

Sensitivity:	<10pg/mL
Material not included:	Microplate reader in standard size. Automated plate washer. Adjustable pipettes and pipette tips. Multichannel pipettes are recommended in the condition of large amount of samples in the detection. Clean tubes and Eppendorf tubes. Washing buffer (neutral PBS or TBS). Preparation of 0.01M TBS: Add 1.2g Tris, 8.5g NaCl

Target Details

Target:	Clusterin (CLU)
Alternative Name:	CLU (CLU Products)
Background:	<p>Protein Function: Functions as extracellular chaperone that prevents aggregation of nonnative proteins. Prevents stress-induced aggregation of blood plasma proteins. Inhibits formation of amyloid fibrils by APP, APOC2, B2M, CALCA, CSN3, SNCA and aggregation-prone LYZ variants (in vitro). Does not require ATP. Maintains partially unfolded proteins in a state appropriate for subsequent refolding by other chaperones, such as HSPA8/HSC70. Does not refold proteins by itself. Binding to cell surface receptors triggers internalization of the chaperone-client complex and subsequent lysosomal or proteasomal degradation. When secreted, protects cells against apoptosis and against cytolysis by complement. Intracellular forms interact with ubiquitin and SCF (SKP1-CUL1-F-box protein) E3 ubiquitin-protein ligase complexes and promote the ubiquitination and subsequent proteasomal degradation of target proteins. Promotes proteasomal degradation of COMMD1 and IKBKB. Modulates NF-kappa-B transcriptional activity. Promotes apoptosis when in the nucleus. Inhibits apoptosis when associated with the mitochondrial membrane by interference with BAX-dependent release of cytochrome c into the cytoplasm. Plays a role in the regulation of cell proliferation (By similarity). .</p> <p>Background: Clusterin(apolipoprotein J) is a 75 - 80 kDa disulfide-linked heterodimeric protein associated with the clearance of cellular debris and apoptosis.[1] In humans, clusterin is encoded by the CLU gene.This protein has several Synonyms: dimeric acidic glycoprotein(DAG protein), testosterone repressed prostate message-2(TRPM-2), sulfated glycoprotein-2(SGP-2) and complement lysis inhibitor(CLI). Clusterin was mapped to mouse chromosome 14.</p> <p>Clusterin is a ubiquitously expressed molecule thought to influence a variety of processes including cell death. In the brain, it accumulates in dying neurons following seizures and hypoxic-ischemic(H-I) injury. clusterin may be a new therapeutic target to modulate non-caspase-dependent neuronal death following acute brain injury.</p> <p>Synonyms: Clusterin,Apolipoprotein J,Apo-J,Clustrin,Sulfated glycoprotein 2,SGP-2,Clusterin beta chain,Clusterin alpha chain,Clu,Apoj, Msgp-2,</p>

Target Details

Full Gene Name: Clusterin

Cellular Localisation: Secreted . Nucleus . Cytoplasm . Mitochondrion membrane, Peripheral membrane protein, Cytoplasmic side . Cytoplasm, cytosol . Microsome . Endoplasmic reticulum . Cytoplasmic vesicle, secretory vesicle, chromaffin granule . Can retrotranslocate from the secretory compartments to the cytosol upon cellular stress. Detected in perinuclear foci that may be aggresomes containing misfolded, ubiquitinated proteins. Detected at the mitochondrion membrane upon induction of apoptosis (By similarity)..

Gene ID:	12759
UniProt:	Q06890
Pathways:	Apoptosis , Negative Regulation of intrinsic apoptotic Signaling

Application Details

Application Notes:	Before using Kit, spin tubes and bring down all components to bottom of tube. Duplicate well assay was recommended for both standard and sample testing.
Comment:	Tissue Specificity: Most abundant in stomach, liver, brain, and testis, with intermediate levels in heart, ovary and kidney.
Plate:	Pre-coated
Protocol:	mouse Clusterin ELISA Kit was based on standard sandwich enzyme-linked immune-sorbent assay technology. A monoclonal antibody from rat specific for Clusterin has been precoated onto 96-well plates. Standards(NSO, D22-R226(β)&S227-E448(α)) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Clusterin is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex was added and unbound conjugates were washed away with PBS or TBS buffer. HRP substrate TMB was used to visualize HRP enzymatic reaction. TMB was catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the mouse Clusterin amount of sample captured in plate.
Assay Procedure:	Aliquot 0.1 mL per well of the 20000pg/mL, 10000pg/mL, 5000pg/mL, 2500pg/mL, 1250pg/mL, 625pg/mL, 312pg/mL mouse Clusterin standard solutions into the precoated 96-well plate. Add 0.1 mL of the sample diluent buffer into the control well (Zero well). Add 0.1 mL of each properly diluted sample of mouse cell culture supernates, serum or plasma(heparin, EDTA) to each empty well. See "Sample Dilution Guideline" above for details. It is recommended that each mouse Clusterin standard solution and each sample be measured in duplicate.

Application Details

Assay Precision:	<ul style="list-style-type: none">• Sample 1: n=16, Mean(ng/ml): 1.32, Standard deviation: 0.086, CV(%): 6.5• Sample 2: n=16, Mean(ng/ml): 6.7, Standard deviation: 0.275, CV(%): 4.1• Sample 3: n=16, Mean(ng/ml): 13.5, Standard deviation: 0.567, CV(%): 4.2,• Sample 1: n=24, Mean(ng/ml): 1.43, Standard deviation: 0.12, CV(%): 8.4• Sample 2: n=24, Mean(ng/ml): 7.4, Standard deviation: 0.555, CV(%): 7.5• Sample 3: n=24, Mean(ng/ml): 14.1, Standard deviation: 1.114, CV(%): 7.9
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Restrictions:	For Research Use only
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Handling

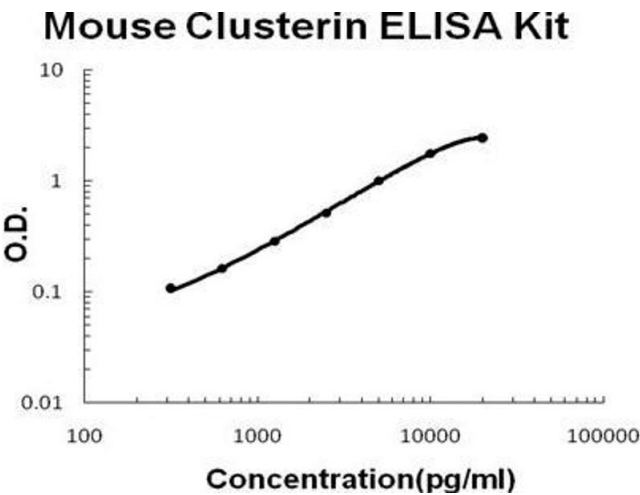
Handling Advice:	Avoid multiple freeze-thaw cycles.
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Storage:	-20 °C,4 °C
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Storage Comment:	Store at 4°C for 6 months, at -20°C for 12 months. Avoid multiple freeze-thaw cycles
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Expiry Date:	12 months
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Images



ELISA

Image 1. Mouse Clusterin PicoKine ELISA Kit standard curve