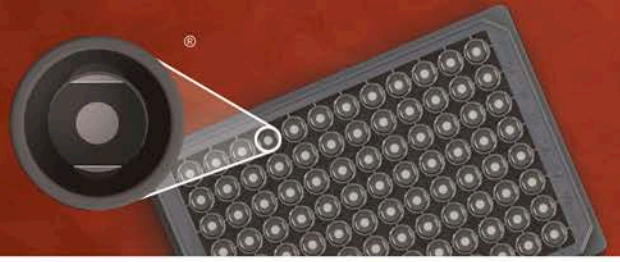
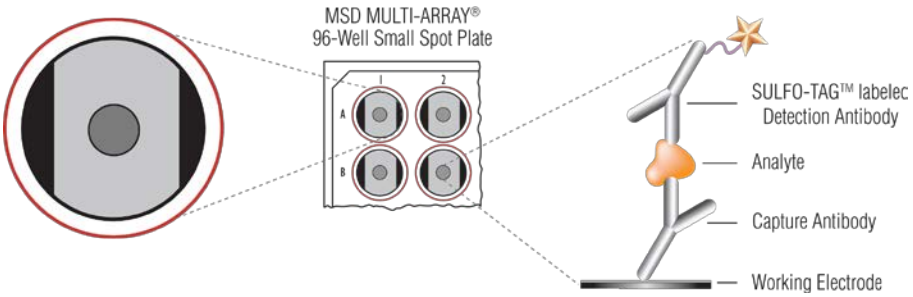
MSD® Rat Clusterin Kit

For quantitative determination in rat urine



Alzheimer's Disease
BioProcess
Cardiac
Cell Signaling
Clinical Immunology
Cytokines
Growth Factors
Hypoxia
Immunogenicity
Inflammation
Metabolic
Oncology
Toxicology
Vascular



Clusterin is a glycoprotein that is found in most mammalian tissues. It is induced in several renal disease states making it a putative biochemical marker of kidney damage and disease. The assay is optimized for sensitivity, specificity, spike recovery, dilution linearity, precision, accuracy, and robustness. The assay is available on 96-well Small Spot plates. Representative data from assay development are presented below. Visit www.mesoscale.com for a complete listing of our products.

Catalog Numbers

Rat Clusterin Kit	
Kit size	
1 plate	K153MGC-1
5 plates	K153MGC -2
25 plates	K153MGC -4

Ordering Information

MSD Customer Service
Phone: 1-301-947-2085
Fax: 1-301-990-2776
Email: CustomerService@mesoscale.com

Company Address

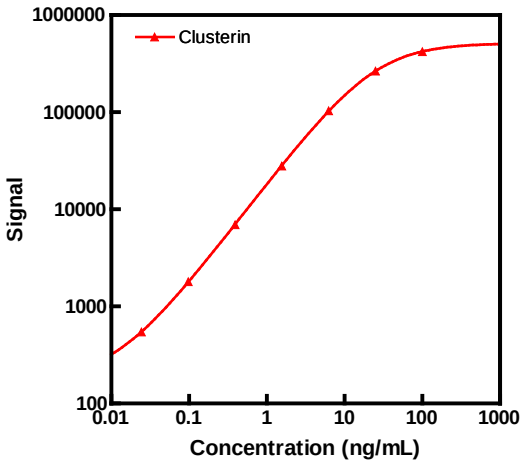
MESO SCALE DISCOVERY®
A division of
Meso Scale Diagnostics, LLC.
9238 Gaither Road
Gaithersburg, MD 20877 USA

www.mesoscale.com®

For Research Use Only. Not for use in diagnostic procedures.

Assay Sensitivity

The following standard curve illustrates the dynamic range of the Rat Clusterin assay.



	Clusterin
Average LLOD (ng/mL)	0.0012

The lower limit of detection (LLOD) is a calculated concentration based on a signal 2.5 standard deviations above the background (zero calibrator blank). The LLOD shown above was calculated based on 12 runs.

Dilution Linearity

To assess linearity, rat urine samples were diluted 2.5-fold, 5-fold, 10-fold, and 20-fold before testing. Percent recovery at each dilution was calculated by dividing the measured concentration by the expected concentration, i.e., the concentration of the previous dilution. The average percent recovery shown below was calculated from samples with values above the LLOD. % Recovery=measured/expected*100

		Clusterin	
Sample Type	Fold Dilution	Average % Recovery	% Recovery Range
Urine (N=3)	5	117	108–129
	10	107	104–113
	20	105	98–110

Spike Recovery

Rat urine samples were diluted 10-fold and spiked with calibrator at multiple levels throughout the range of the assay. The average percent recovery shown below was calculated from samples with values above the LLOD. % Recovery=measured/expected*100

	Clusterin		
Sample Type	Spike Conc. (ng/mL)	Average % Recovery	% Recovery Range
Urine (N=4)	50	86	85–86
	10	86	83–87
	1.0	82	79–85

Tested Samples

Urine samples were collected from normal Sprague-Dawley rats, diluted 10-fold, and tested with the Rat Clusterin assay. Median and range of concentrations are displayed below. Concentrations are corrected for sample dilution.

Sample Type	Statistic	Clusterin
Urine	Median (ng/mL)	2.5
	Range (ng/mL)	<LLOD–88
	Number of Samples	41
	Samples above LLOD	39

Precision

Rat urine-based controls with high and low levels of analytes were measured using a minimum of 2 replicates on 12 runs over 4 days. Average intra-run %CV is the average %CV of the control replicates on an individual run. Inter-run %CV is the variability of controls across 12 runs.

	Control	Runs	Average Conc. (ng/mL)	Average Intra-run %CV	Inter-run %CV
Clusterin	High	12	13	3.8	11.3
	Low	12	0.28	2.6	10.5