



[www.mesoscale.com](http://www.mesoscale.com)<sup>®</sup>

### Ordering Information

MSD Customer Service  
 Phone: 1-240-314-2795  
 Fax: 1-301-990-2776  
 Email: [CustomerService@mesoscale.com](mailto:CustomerService@mesoscale.com)  
[www.mesoscale.com/support](http://www.mesoscale.com/support)

### Scientific Support

Phone: 1-240-314-2798  
 Email: [ScientificSupport@mesoscale.com](mailto:ScientificSupport@mesoscale.com)  
[www.mesoscale.com/support](http://www.mesoscale.com/support)

### Company Address

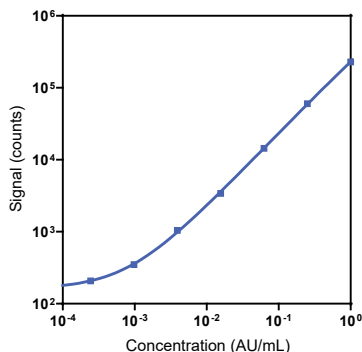
MESO SCALE DISCOVERY<sup>®</sup>  
 A division of  
 Meso Scale Diagnostics, LLC.  
 1601 Research Boulevard  
 Rockville, MD 20850-3173 USA

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

Product Options	Catalog Number	Description
Singleplex	K1515LR-2	R-PLEX Human CD63 (EV) Assay with SECTOR™ plates
	K1515LR-22	R-PLEX Human CD63 (EV) Assay with QuickPlex <sup>®</sup> plates
Antibody Set	F215L-3	R-PLEX Human CD63 (EV) Antibody Set
Protocol	R-PLEX Product Inserts are available at <a href="http://www.mesoscale.com">www.mesoscale.com</a>	

R-PLEX<sup>®</sup> Antibody Sets and Assays provide an expanded menu of electrochemiluminescence reagents for biomarker discovery and development. The Antibody Sets include a matched, biotinylated capture and SULFO-TAG™ conjugated detection antibody pair and Calibrator for the quick and easy development of highly sensitive immunoassays. R-PLEX EV Assays add diluents, MSD GOLD™ Read Buffer B, and either MSD GOLD small spot streptavidin QuickPlex or SECTOR plates, providing a complete set of components to develop and run an assay. R-PLEX Assays with QuickPlex plates can only be read on MESO<sup>®</sup> QuickPlex Q 60MM instruments. R-PLEX Assays with SECTOR plates can be read on all MESO SECTOR<sup>®</sup> and MESO QuickPlex<sup>®</sup> SQ 120/120MM instruments.

### Representative Calibration Curve and Sensitivity



Calibrator Stock (1X)	1 AU/mL
Calibrator Standard 1 (top of curve)	1 AU/ml
LLOD	1.0 x 10 <sup>-3</sup> AU/mL
AU = Arbitrary Units; Human EV Calibrator 1 (nominal concentration = 1 AU/mL) is an isolate of conditioned medium from the THP-1 cell line.	

Representative data using the primary diluent pair in singleplex are presented above. The calibration curve was fitted with a 4-parameter logistic (or sigmoidal dose-response) model with a 1/Y<sup>2</sup> weighting. The lower limit of detection (LLOD) is a calculated concentration corresponding to the signal 2.5 standard deviations above the background (zero Calibrator).

Refer to the R-PLEX EV Singleplex Product Insert when developing a singleplex assay. This insert as well as R-PLEX assay datasheets are available at [www.mesoscale.com](http://www.mesoscale.com).

### Sample Dilution

The R-PLEX Human CD63 (EV) Antibody Set has been tested with the following sample type(s) at the specified dilution in assay diluent.

Sample Type	Fold Dilution
Serum	10
Plasma	20
CSF	10
Urine	Neat

The fold dilution specified is a suggested dilution. We recommend that sample dilution and other assay parameters be optimized prior to running samples.

# R-PLEX Antibody Set

## Source

<b>Calibrator</b>	Human EV Calibrator 1
<b>Antibodies</b>	Capture antibody - mouse monoclonal, detection antibody - mouse monoclonal
<b>Assay generation</b>	A

## Recommended Assay Components

The following items are recommended for developing assays using R-PLEX Antibody Sets.

**Plates for Singleplex Assay Development:** Plates are available in packs of 1, 5, 30, 120, and 510

Description	Catalog No.	Included in:
MSD GOLD 96-well Small Spot Streptavidin SECTOR Plates	L45SA	K1515LR-2
MSD GOLD 96-well Small Spot Streptavidin QuickPlex Plates	L4BSA	K1515LR-22

**Buffers:** MSD GOLD Read buffer B has been specially formulated for compatibility with EV assays. Do not use other MSD read buffers for EV assays.

Description	Catalog No.	Included in:
MSD GOLD Read Buffer B (200 mL)	R60AM-3	K1515LR
MSD Wash Buffer (20X, 100 mL)	R61AA-1	–

## Diluent Compatibility

The R-PLEX Human CD63 (EV) Antibody Set has been tested with the following diluent pair(s). The primary pair was used for generating the data shown above. These diluents were formulated for EV assays. Do not use other MSD diluents for EV assays.

Tested Diluent Pair	Assay Diluent		Antibody Diluent	
	Description	Catalog No.	Description	Catalog No.
Primary	Diluent 52	R52AA-1	Diluent 53	R52AB-1

Diluents sufficient to run 40 samples per plate in duplicate with up to a 10-fold sample dilution are provided with R-PLEX assays.

Additional assay diluent may be necessary for samples that are diluted greater than 10-fold and can be ordered separately.