



www.mesoscale.com

Ordering Information

MSD Customer Service
Phone: 1-240-314-2795
Fax: 1-301-990-2776
Email: CustomerService@mesoscale.com
www.mesoscale.com/support

Scientific Support

Phone: 1-240-314-2798
Email: ScientificSupport@mesoscale.com
www.mesoscale.com/support

Company Address

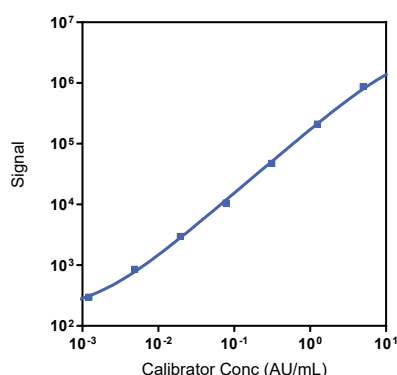
Meso Scale Discovery
A division of
Meso Scale Diagnostics, LLC.
1601 Research Boulevard
Rockville, MD 20850-3173 USA

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

Product Options	Catalog Number	Description
Singleplex	K1515MR-2	R-PLEX Human CD9 (EV) Assay with SECTOR™ plates
	K1515MR-22	R-PLEX Human CD9 (EV) Assay with QuickPlex Ultra™ plates
Antibody Set	F215M-3	R-PLEX Human CD9 (EV) Antibody Set
Protocol	Assay Protocol 1 in the R-PLEX Antibody Sets Singleplex Assays Insert	

MESO SCALE DISCOVERY® R-PLEX 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 the appropriate plates, providing a complete set of components to develop and run an assay. R-PLEX Assays with QuickPlex Ultra plates can only be read on the MESO® QuickPlex Q 60MM instrument. R-PLEX Assays with SECTOR plates can be read on all MESO SECTOR® instruments and the MESO QuickPlex® SQ 120/120MM instrument.

Representative Calibration Curve and Sensitivity



Calibrator Stock (1X)	5 AU/mL
Calibrator Standard 1 (top of curve)	5 AU/mL
LLOD	5.42 x 10 ⁻⁴ AU/mL
AU = Arbitrary Units; Human EV Calibrator 2 (nominal concentration = 1 AU/mL) is an isolate of conditioned medium from the Expi293 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/Y² 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.

Sample Dilution

The R-PLEX Human CD9 (EV) Antibody Set has been tested with the following sample type(s) at the specified dilution in assay diluent.

Sample Type	Recommended Fold Dilution
Serum	10
Plasma	50
CSF	10
Urine	4

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

Calibrator	Human EV Calibrator 2
Antibodies	Capture antibody - mouse monoclonal, detection antibody - mouse monoclonal
Assay generation	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	K1515MR-2
96-well Small Spot Streptavidin QuickPlex Ultra Plates	L4BLA	K1515MR-22

Buffers: EV Assays require the use of MSD GOLD Read buffer B. Do not use other MSD read buffers for EV assays.

Description	Catalog No.	Included in:
MSD GOLD Read Buffer B (200 mL)	R60AM-3	K1515MR
MSD Wash Buffer (20X, 100 mL)	R61AA-1	—

Diluent Compatibility

The R-PLEX Human CD9 (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.

