

Brigham Research Assay Core (BRAC)
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Human soluble Vascular Cell Adhesion Molecule (sVCAM-1)

Method:	Enzyme -linked immunosorbent assay (ELISA)
Kit Manufacturer:	R & D Systems, Minneapolis, MN
Description:	This assay employs the quantitative sandwich enzyme immunoassay technique. A monoclonal antibody specific for sVCAM-1 has been pre-coated onto a microplate. Standards, samples, controls, and conjugate are pipetted into the wells and any sVCAM-1 present is sandwiched by the immobilized antibody and the enzyme-linked monoclonal antibody specific for sVCAM-1. Following a wash to remove any unbound substances and/or antibody-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of sVCAM-1 bound. The color development is stopped and the intensity of the color is measured.

Collection and Performance Characteristics

Tube type:	Preferred: SST Alternate: EDTA or Heparin
Minimum Volume:	0.2 mL
Lowest Reportable Value:	12 ng/mL
Dynamic Range:	12-4000 ng/mL
Precision:	The intra-assay variation is 0.9-3.4% The inter-assay variation is 2.5-6.2%.

Reference Range:

Sample Type	Mean (ng/mL)	Range (ng/mL)	Standard Deviation (ng/mL)
Serum (n=36)	557	349 - 991	139.6
EDTA plasma (n=36)	531	341 - 897	132.5
Heparin plasma (n=36)	491	301 - 875	149.3