

# Human Anti-mutated citrullinated vimentin antibody (MCV-Ab) ELISA Kit

Catalog No: #EK11726

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Package Size: #EK11726-1 48T #EK11726-2 96T

## Description

Product Name	Human Anti-mutated citrullinated vimentin antibody (MCV-Ab) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5% within the expiration date under appropriate storage condition. The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days, and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).

## Application Details

Detect Range:5 U/mL - 400 U/mL

Sensitivity:3.25 &amp;mu;/mL

Sample Type:Serum, Plasma, Other biological fluids

Sample Volume: 1-200 &amp;mu;L

Assay Time:1-4.5h

Detection wavelength:450 nm

## Product Description

Detection Method:Competitive ELISA

Test principle:This assay employs the competitive enzyme immunoassay technique. The microtiter plate provided in this kit has been pre-coated with an antibody specific to MCV-Ab. Standards or samples are then added to the appropriate microtiter plate wells with a Horseradish Peroxidase (HRP)-conjugated MCV-Ab and incubated. The competitive inhibition reaction is launched between with HRP labeled MCV-Ab and unlabeled MCV-Ab with the antibody. A substrate solution is added to the wells and the color develops in opposite to the amount of MCV-Ab in the sample. The color development is stopped and the intensity of the color is measured.

Product Overview:Detection of autoantibodies against mutated citrullinated vimentin is part of rheumatoid arthritis (RA) diagnostics, especially in sera negative for rheumatoid factor. Anti-MCV antibodies are member of ACPA family, a group of the so called antibodies to citrullinated protein/peptide antigens.MCV is the abbreviation for Mutated Citrullinated Vimentin. Vimentin itself is a protein of the cytoskeleton of several cells like mesenchymal cells and osteocytes. It is used as a marker for soft tissue tumors.Vimentin is an omnipresent citrullinated protein, which was observed in the rheumatoid synovial tissue of RA patients. Antibodies against citrullinated vimentin show the highest specificity in the diagnosis of RA. The citrullination of vimentin is caused by PAD (peptidylarginine deiminase) which induces changes in the protein structure and increases potential epitopes - targets for the autoantibodies coherent to RA.

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Note: This product is for in vitro research use only