

产品概述

产品名 (Product Name)	Anti Citrullinated Vimentin mouse monoclonal antibody
货号 (Catalog No.)	ATMA10007Mo
种类 (Category)	Primary antibody
宿主 (Host)	Mouse
反应种属 (Species specificity)	Homo sapiens (Human)
应用实验 (Tested applications)	Elisa, WB, IF, IHC
克隆性 (Clonality)	Monoclonal
克隆编号 (Clone No.)	68-C-3
偶连物 (Conjugation)	Unconjugate
免疫原 (Immunogen)	Citrullinated peptide sequence from an internal region of human vimentin
别名	VIM
Uniprot ID	P08670

产品性能

状态 (Form)	Liquid
储存溶液 (Buffer)	PBS, pH7.4, containing 0.05% proclin300, 50% glycerol.
存放条件 (Storage)	Use a manual defrost freezer and avoid repeated freeze thaw cycles. Store at 4 °C for frequent use. Store at -20 to -80 °C for twelve months from the date of receipt.
浓度 (Concentration)	0.54mg/ml
亚型 (Isotype)	IgM
分子量 (MW)	54 kDa
纯化方式 (Purity)	Protein G purified from mice ascites

应用

Elisa: 1:4000~8000, WB: 1:1000~4000, IF: 1:100~200, IHC: 1:50~100

产品背景

Anti Citrullinated Vimentin mouse monoclonal antibody

Vimentins are class-III intermediate filaments found in various non-epithelial cells, especially mesenchymal cells. Vimentin is attached to the nucleus, endoplasmic reticulum, and mitochondria, either laterally or terminally. Citrullination is a modification of proteins where a nitrogen in the amino acid arginine is replaced with an oxygen, converting it into citrulline. The modified (citrullinated) protein may be identified by as foreign, provoking an autoimmune inflammation response. Various kinds of citrullinated proteins have been detected in the joints of RA patients.

One of these is Sa antigen, now known as mutated citrullinated vimentin (MCV). Citrullination of vimentin plays a decisive role in RA pathogenesis. In rheumatology diagnostics, autoantibodies against mutated citrullinated vimentin (anti-MCV) are of prominent diagnostic and prognostic value. Their significance is greater than that of rheumatoid factor. Recently a serological point-of-care test (POCT) for the early detection of RA has been developed. This assay combines the detection of rheumatoid factor and anti-MCV for diagnosis of rheumatoid arthritis and shows a sensitivity of 72% and specificity of 99.7%. Anti-MCV are used as efficient biomarkers for estimating progress of rheumatoid arthritis. Main advantage of testing for anti-MCV is the early appearance of the anti-MCV antibodies, what allows for detection of early RA and submits adequate therapy just after the disease's onset. Moreover, anti-MCV titres show strong correlation to disease activity, disease severity and the success of therapy.