

Product Name
Monoclonal Human
Anti-Modified Citrulline (AMC),
Immunoglobulin, clone C4



CAT No.
MQR2.601-100

Size
100 µg

Edition: December 22, 2015

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Intended use

This product is for research use only. **NOT for use in diagnostic or therapeutic procedures.**

This product is tested for use in enzyme-linked immunosorbent assay (ELISA) and Western Blot (WB).

Reagent provided

The antibody is supplied in PBS

Isotype

Human IgG1λ

Immunogen

Citrulline-containing peptide modified with 2,3-butanedione monoxime and antipyrine.

Specificity

Specificity has been tested in ELISA (figure 1) and WB (figure 2). Recognizes citrulline-containing proteins modified with 2,3-butanedione monoxime and antipyrine regardless of neighbouring amino acid sequences.

Purity

Protein A purified.

Precautions

1. For professional users.
2. As with any product derived from biological sources, proper handling procedures should be used.
3. The product may be used in different techniques and in combination with different sample types and materials, therefore each individual laboratory should validate the applied test system.

Preparation of the antibody

Use antibody as supplied.

Storage instructions

Store at -80°C.

AVOID FREEZE-THAW CYCLES

Application guidelines

ELISA: 0.08 – 0.4 µg/ml

WB: 1 µg/ml

Unless the stability in the actual test system has been established, it is recommended to dilute the product immediately before use.

Relevance

This antibody is developed for the detection of citrulline containing proteins. The amino acid citrulline is generated by posttranslational modification of arginine by peptidylarginine-deiminases (PADs; MQ16.201 and MQ16.203). Antibodies directed to citrulline containing proteins (e.g. histones) are detected in rheumatoid arthritis patients.

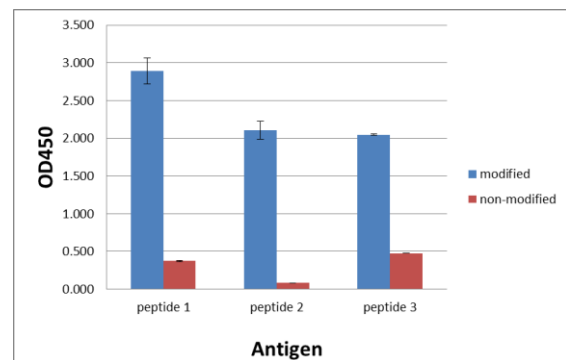


Figure 1: Specificity of AMC Immunoglobulin (MQR2.601), determined by ELISA. Antibody diluted to 0.4 µg/ml in PBS containing 0.05% tween-20 and 1% BSA was tested on various modified citrulline-containing peptides and their non-modified forms.

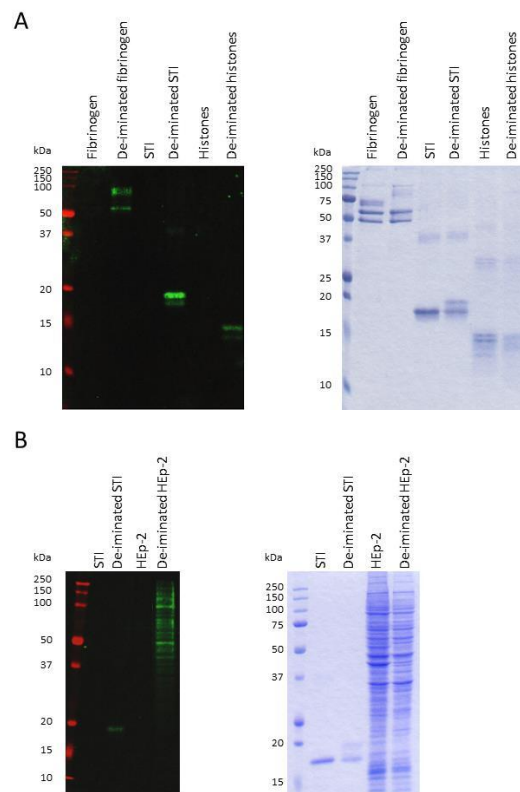


Figure 2: Specificity of AMC Immunoglobulin (1 µg/ml, diluted in PBS containing 0.05% tween-20 and 5% milk powder), was determined by WB.

A) After blotting, the proteins on the membrane (fibrinogen, soybean trypsin inhibitor (STI), histones and their de-aminated forms) were chemically modified with 2,3-butanedione monoxime and antipyrine. Subsequently, the membrane was probed with AMC antibody. The right panel shows the corresponding SDS-PAGE gel stained with coomassie.

B) AMC antibody was tested on 10 µg HEP-2 cell lysate and 10 µg of its de-aminated form after chemical modification of the proteins on the membrane with 2,3-butanedione monoxime and antipyrine (left panel). As control (de-aminated) STI was loaded. The right panel shows the corresponding SDS-PAGE gel stained with coomassie.