PRODUCT INFORMATION

Citrullinated Vimentin Monoclonal Antibody (Clone 12G11)
Item No. 22054

Overview and Properties

Contents: This vial contains 100 µg of protein G-purified IgG.
Immunogen: Citrullinated peptide sequence from an internal region of human vimentin
Cross Reactivity: (+) Citrullinated vimentin; (-) Unmodified protein
Species Reactivity: (+) Human citrullinated vimentin; all others not tested though sequence conservation of >95% with bovine, pig, mouse, and rat indicates potential species reactivity
Uniprot No.: P08670
Form: Liquid
Storage: -20°C (as supplied)
Stability: ≥1 year
Storage Buffer: PBS, pH 7.2 with 50% glycerol and 0.02% sodium azide
Clone: 12G11
Host: Mouse
Isotype: IgG1
Applications: ELISA, and Western blot (WB); the recommended starting dilution for ELISA and WB is 1:1,000. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

Image

Lane 1: Recombinant human vimentin (25 ng)
Lane 2: Recombinant human vimentin (50 ng)
Lane 3: Recombinant human vimentin (100 ng)
Lane 4: Recombinant human vimentin (250 ng)
Lane 5: Citrullinated recombinant human vimentin (25 ng)
Lane 6: Citrullinated recombinant human vimentin (50 ng)
Lane 7: Citrullinated recombinant human vimentin (100 ng)
Lane 8: Citrullinated recombinant human vimentin (250 ng)

-54 kDa
Vimentin is a cytoskeleton intermediate filament protein present in cells of mesenchymal origin, including leukocytes, endothelial cells, and smooth muscle cells. It is subject to citrullination by peptidyl arginine deiminase 2 (PAD2; Item No. 10785) under high calcium concentrations, which can occur during macrophage apoptosis. Citrullinated vimentin has been shown to have a role in the production of anti-citrullinated protein antibodies (ACPAs). ACPAs against citrullinated proteins, such as vimentin, are considered to be highly specific markers for rheumatoid arthritis and other autoimmune diseases. Cayman’s Citrullinated Vimentin Monoclonal Antibody (Clone 12G11) can be used for Western blot and ELISA applications. The antibody recognizes citrullinated vimentin at ~54 kDa from human samples.

References