

## VIM Antibody (monoclonal) (M01)

Mouse monoclonal antibody raised against a partial recombinant VIM. Catalog # AT4513a

### Specification

## VIM Antibody (monoclonal) (M01) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW IF, IP, WB <u>P08670</u> <u>BC030573</u> Human mouse Monoclonal IgG2a Kappa 53652

## VIM Antibody (monoclonal) (M01) - Additional Information

Gene ID 7431

**Other Names** Vimentin, VIM

# **Target/Specificity** VIM (AAH30573, 41 a.a. ~ 140 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000

**Format** Clear, colorless solution in phosphate buffered saline, pH 7.2.

Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions** VIM Antibody (monoclonal) (M01) is for research use only and not for use in diagnostic or therapeutic procedures.

### VIM Antibody (monoclonal) (M01) - Protocols

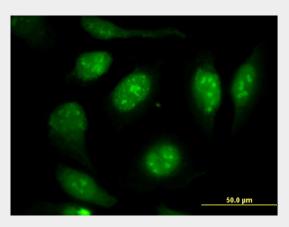
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry

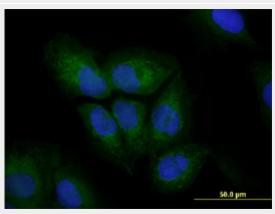


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

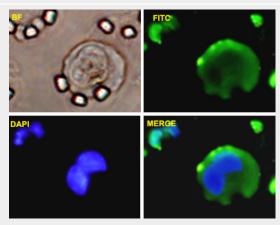
## VIM Antibody (monoclonal) (M01) - Images



Immunofluorescence of monoclonal antibody to VIM on HeLa cell. [antibody concentration 40 ug/ml]

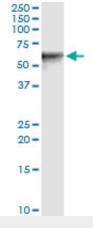


Immunofluorescence of monoclonal antibody to VIM on U-2 OS cell. [antibody concentration 10 ug/ml]

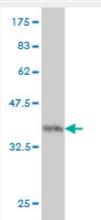


Detection limit for recombinant GST tagged VIM is approximately 10ng/ml as a capture antibody.

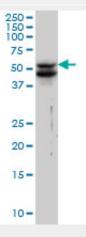




Immunoprecipitation of VIM transfected lysate using anti-VIM monoclonal antibody and Protein A Magnetic Bead (<u>U0007</u>), and immunoblotted with VIM MaxPab rabbit polyclonal antibody.

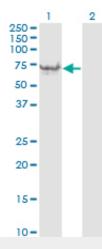


Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.74 KDa).



VIM monoclonal antibody (M01), clone 3E9 Western Blot analysis of VIM expression in HeLa ( (Cat # AT4513a )





Western Blot analysis of VIM expression in transfected 293T cell line by VIM monoclonal antibody (M01), clone 3E9.

Lane 1: VIM transfected lysate(53.7 KDa). Lane 2: Non-transfected lysate.

# VIM Antibody (monoclonal) (M01) - Background

This gene encodes a member of the intermediate filament family. Intermediate filamentents, along with microtubules and actin microfilaments, make up the cytoskeleton. The protein encoded by this gene is responsible for maintaining cell shape, integrity of the cytoplasm, and stabilizing cytoskeletal interactions. It is also involved in the immune response, and controls the transport of low-density lipoprotein (LDL)-derived cholesterol from a lysosome to the site of esterification. It functions as an organizer of a number of critical proteins involved in attachment, migration, and cell signaling. Mutations in this gene causes a dominant, pulverulent cataract.

## VIM Antibody (monoclonal) (M01) - References

Aberrant expression of vimentin correlates with dedifferentiation and poor prognosis in patients with intrahepatic cholangiocarcinoma. Korita PV, et al. Anticancer Res, 2010 Jun. PMID 20651380.Proteome analysis of the thalamus and cerebrospinal fluid reveals glycolysis dysfunction and potential biomarkers candidates for schizophrenia. Martins-de-Souza D, et al. J Psychiatr Res, 2010 May 14. PMID 20471030.Association study of 182 candidate genes in anorexia nervosa. Pinheiro AP, et al. Am J Med Genet B Neuropsychiatr Genet, 2010 Jul. PMID 20468064.Divalent cations crosslink vimentin intermediate filament tail domains to regulate network mechanics. Lin YC, et al. J Mol Biol, 2010 Jun 18. PMID 20447406.Diagnostic value and implications of vimentin expression in normal, reactive and neoplastic endocervical epithelium. Stewart CJ, et al. Pathology, 2010 Apr. PMID 20350213.