

AM32837PU-S**Monoclonal Antibody to Vimentin - Purified****Alternate names:**

VIM

Quantity:

0.1 mg

Concentration:

0.2 mg/ml

Background:

Vimentin is a protein belonging to the class of intermediate filaments of the cell, which includes other proteins such as keratins, desmin, neurofilaments, and nuclear lamins. It is present in the majority of cells of mesenchymal and nonmesenchymal origin, and its filaments are associated with both the nuclear and plasma membranes. Vimentin is highly expressed in fibroblasts and is also expressed in many hormone-independent breast carcinoma cell lines.

Uniprot ID:[P08670](#)**NCBI:**[NP_003371.2](#)**GeneID:**[7431](#)**Host / Isotype:**

Mouse / IgG1

Recommended Isotype Controls:

SM10P (for use in human samples), AM03095PU-N

Clone:

VM452

Immunogen:

Human Vimentin Recombinant protein.

Format:**State:** Liquid purified IgG fraction from Bioreactor Concentrate**Purification:** Protein A/G Chromatography**Buffer System:** 10mM PBS**Preservatives:** 0.05% Sodium Azide**Stabilizers:** 0.05% BSA**Applications:****ELISA:** Use Antibody without BSA For coating.**Flow Cytometry:** 0.5-1 µg/10⁶ cells.**Immunofluorescence:** 1-2 µg/ml.**Western Blot:** 0.5-1 µg/ml.**Immunoprecipitation:** 1-2 µg/500 µg protein lysate.**Immunohistochemistry on Frozen and Formalin-Fixed Paraffin Sections:** 0.5-1 µg/ml for 30 minutes at RT.

Staining of formalin-fixed tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes.

Positive Control: Jurkat cells, Sarcomas, Melanomas.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Molecular Weight:

57-60kDa

Specificity:

This Monoclonal VM452 Antibody reacts with a 58kDa protein identified as Vimentin. It shows no cross-reaction with other closely related intermediate filament proteins (IFP's) such as desmin, keratin, neurofilament, and glial fibrillary acid protein. Anti-Vimentin alone is of limited value as a diagnostic tool; however, when used in panels with other antibodies, it is useful for the sub-classification of a given tumor. Expression of vimentin, when used in conjunction with anti-keratin, is helpful when distinguishing melanomas from undifferentiated carcinomas and large cell lymphomas. All melanomas and Schwannomas react strongly with anti-vimentin. It labels a variety of mesenchymal cells, including melanocytes, lymphocytes, endothelial cells, and fibroblasts. Non-reactivity of anti-Vimentin is often considered more useful than its positive reactivity, since there are a few tumors that do not contain vimentin, e.g. hepatoma and seminoma. Anti-vimentin is also useful as a tissue process control reagent.

Cellular Localization: Cytoplasmic.

Negative Species: Mose, Rat.

Species Reactivity:

Tested: Human, Cow, Dog, Cat, Pig, Goat and Chicken.

Storage:

Store undiluted at 2-8°C.

Shelf life: one year from despatch.

General Readings:

1. Osborn M, Debus E, Weber K. Monoclonal antibodies specific for vimentin. Eur J Cell Biol. 1984 May;34(1):137-43. PubMed PMID: 6428888.

Pictures:

Formalin-paraffin human melanoma stained with Vimentin Antibody Cat.-No AM32837PU (Clone VM452).

