

# **Product datasheet for AM06304SU-N**

### OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

### Vimentin (VIM) Mouse Monoclonal Antibody [Clone ID: 4F2E9]

#### **Product data:**

**Product Type:** Primary Antibodies

Clone Name: 4F2E9

Applications: IHC, WB

Recommended Dilution: ELISA: 1/10000.

Western Blot: 1/500 - 1/2000.

**Immunohistochemistry on Paraffin Sections:** 1/200 - 1/1000.

Reactivity: Human, Monkey

Host: Mouse Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** Purified recombinant fragment of Vimentin (aa2-466) expressed in E. Coli.

**Specificity:** Recognizes Vimentin.

Formulation: State: Ascites

State: Ascitic fluid containing 0.03% Sodium Azide.

Conjugation: Unconjugated

Storage: Store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.

Avoid repeated freezing and thawing.

**Stability:** Shelf life: one year from despatch.

Gene Name: vimentin

Database Link: Entrez Gene 7431 Human

P08670

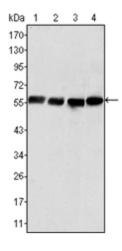


#### Background:

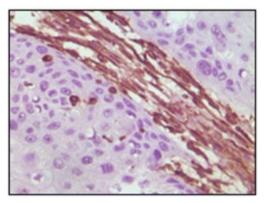
Vimentin, also know as VIM is the major subunit protein of the intermediate filaments of mesenchymal cells. It is believed to be involved with the intracellular transport of proteins between the nucleus and plasma membrane. Vimentin has been implicated to be involved in the rate of steroid synthesis via its role as a storage network for steroidogenic cholesterol containing lipid droplets. Vimentin phosphorylation by a protein kinase causes the breakdown of intermediate filaments and activation of an ATP and myosin light chain dependent contractile event. This results in cytoskeletal changes that facilitate the interaction of the lipid droplets within mitochondria, and subsequent transport of cholesterol to the organelles leading to an increase in steroid synthesis. Immunohistochemical staining for Vimentin is characteristic of sarcomas (of neural, muscle and fibroblast origin) compared to carcinomas which are generally negative. Melanomas, lymphomas and vascular tumors may all stain for Vimentin. Vimentin antibodies are thus of value in the differential diagnosis of undifferentiated neoplasms and malignant tumors. They are generally used with a panel of other antibodies including those recognising cytokeratins, lymphoid markers, \$100, desmin and neurofilaments.

Synonyms: VIM

## **Product images:**



Western blot analysis using Vimentin antibody Cat.-No AM06304SU-N against Hela (Lane 1), COS (Lane 2), HEK293 (Lane 3) and U20S (Lane 4) cell lysate.



Immunohistochemical analysis of paraffinembedded human lung carcinoma tissue, showing cytoplasmic localization using Vimentin antibody Cat.-No AM06304SU-N with DAB staining.

