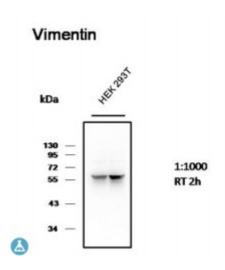


## **Anti-Vimentin antibody**



**Description** Mouse monoclonal to Vimentin.

Model STJ97060

**Host** Mouse

**Reactivity** Human, Mouse, Rat

**Applications** WB

Immunogen Recombinant Protein

**Gene ID** 7431

Gene Symbol VIM

**Dilution range** WB 1:1000-3000

**Specificity** The antibody detects endogenous Vimentin protein.

**Tissue Specificity** Highly expressed in fibroblasts, some expression in T- and B-lymphocytes,

and little or no expression in Burkitt's lymphoma cell lines. Expressed in many

hormone-independent mammary carcinoma cell lines.

**Purification** The antibody was affinity-purified from mouse ascites by affinity-

chromatography using specific immunogen.

Clone ID 1A7

**Note** For Research Use Only (RUO).

Protein Name Vimentin

**Clonality** Monoclonal

**Conjugation** Unconjugated

Isotype IgG1

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

**Storage Instruction** Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:12692OMIM:116300</u>

**Alternative Names** Vimentin

**Function** Vimentins are class-III intermediate filaments found in various non-epithelial

cells, especially mesenchymal cells. Vimentin is attached to the nucleus, endoplasmic reticulum, and mitochondria, either laterally or terminally. Involved with LARP6 in the stabilization of type I collagen mRNAs for

CO1A1 and CO1A2.

Sequence and Domain Family The central alpha-helical coiled-coil rod region mediates elementary

homodimerization.; The [IL]-x-C-x-x-[DE] motif is a proposed target motif

for cysteine S-nitrosylation mediated by the iNOS-S100A8/A9

transnitrosylase complex.

**Cellular Localization** Cytoplasm

**Post-translational** Filament disassembly during mitosis is promoted by phosphorylation at Modifications Ser-55 as well as by nestin . One of the most prominent phosphoproteins in

various cells of mesenchymal origin. Phosphorylation is enhanced during cell division, at which time vimentin filaments are significantly reorganized. Phosphorylation by PKN1 inhibits the formation of filaments. Phosphorylated

at Ser-56 by CDK5 during neutrophil secretion in the cytoplasm.

Phosphorylated by STK33. O-glycosylated during cytokinesis at sites identical or close to phosphorylation sites, this interferes with the phosphorylation status. S-nitrosylation is induced by interferon-gamma and oxidatively-

modified low-densitity lipoprotein (LDL(ox)) possibly implicating the iNOS-

S100A8/9 transnitrosylase complex.

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