

sigma-aldrich.com

3050 Spruce Street, St. Louis, MO 63103 USA Tel: (800) 521-8956 (314) 771-5765 Fax: (800) 325-5052 (314) 771-5757 email: techservice@sial.com sigma-aldrich.com

Product Information

Vimentin, His-tagged, human recombinant, expressed in *E. coli* cells

Catalog Number **SRP5150** Storage Temperature –70 °C

Synonyms: VIM, FLJ36605

Product Description

Vimentin is a member of intermediate filament family of proteins and is an important structural feature of eukaryotic cells.¹ Along with microtubules and actin microfilaments, vimentin makes up the cytoskeleton component of cells. Studies have shown vimentin is attached to the nucleus, endoplasmic reticulum, and mitochondria, either laterally or terminally. Vimentin plays a significant role in supporting and anchoring the position of the organelles in the cytosol.² Thus, vimentin plays a key role in maintaining cell shape, integrity of the cytoplasm, and stabilizing cytoskeletal interactions.

Recombinant, full-length, human vimentin was expressed in *E. coli* cells using an N-terminal His tag. The gene accession number is NM_003380. Recombinant protein stored in 50 mM sodium phosphate, pH 7.0, 300 mM NaCl, 150 mM imidazole, 0.1 mM PMSF, 0.25 mM DTT, and 25% glycerol.

Molecular mass: ~60 kDa

Purity: 90-98% (SDS-PAGE, see Figure 1)

Precautions and Disclaimer

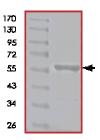
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at -70 °C is recommended. After opening, aliquot into smaller quantities and store at -70 °C. Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.

SDS-PAGE Gel of Typical Lot 90–98% (densitometry)



References

- Fuchs, E., et al., Intermediate filaments: structure, dynamics, function, and disease. Annu. Rev. Biochem., 63, 345–82 (1994).
- Katsumoto, T. et al., The role of the vimentin intermediate filaments in rat 3Y1 cells elucidated by immunoelectron microscopy and computer-graphic reconstruction. Biol. Cell, 68(2), 139–46 (1990).

RC,MAM 11/11-1