Human Vimentin / VIM Protein (His Tag)

Catalog Number: **10028-H08B**

General Information

Gene Name Synonym:

CTRCT30; HEL113

Protein Construction:

A DNA sequence encoding the human VIM (Met1-Glu466) (P08670) was expressed with a C-terminal polyhistidine tag.

Source: Human

Expression Host: Baculovirus-Insect Cells

QC Testing

Purity: > 95 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per μg of the protein as determined by the LAL method

Predicted N terminal: Met 1

Molecular Mass:

The secreted recombinant human VIM consists of 477 amino acids and predicts a molecular mass of 55.11 KDa.

Formulation:

Lyophilized from sterile 40% acetonitrile, 0.1% TFA

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Stability & Storage:
Samples are stable for twelve months from date of receipt at -20℃ to -80℃.

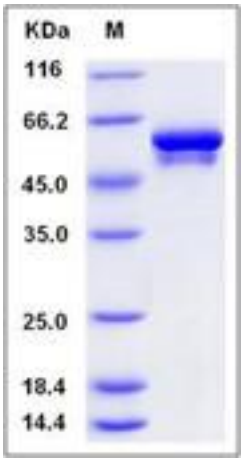
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Vimentin is a type III intermediate filament (IF) protein found in various non-epithelial cells, especially mesenchymal cells. A vimentin monomer, has a central α-helical domain and carboxyl (tail) domains. Two monomers compose the basic subunit of vimentin assembly. Vimentin is crucial for supporting and anchoring the position of the organelles in the cytosol. Vimentin provided cells with a resilience absent from the microtubule or actin filament networks, when under mechanical stress in vivo. Therefore, in general, it is accepted that vimentin is the cytoskeletal component responsible for maintaining cell integrity. Vimentin is also responsible for stabilizing cytoskeletal interactions. It is found that vimentin control the transport of low-density lipoprotein. It has been used as a sarcoma tumor marker to identify mesenchyme.

References

1.Russell RL, et al. (2001) Uridine phosphorylase association with vimentin. Intracellular distribution and localization. J Biol Chem. 276(16):13302-7.
2.Moinova, et al. (2012) Aberrant Vimentin Methylation is Characteristic of Upper GI Pathologies. Cancer Epidemiology Biomarkers Prev. 21(4):594-600.
3.Leader M, et al. (1987) Vimentin: an evaluation of its role as a tumour marker. Histopathology. 11(1):63-72.