



Product Datasheet

Product Name	Vimentin Human Recombinant
Cata No	CB500930
Source	<i>Escherichia Coli.</i>
Synonyms	Vimentin, Vim, FLJ36605.

Description

Vimentin expression in human malignant glioma cells depends on cellular density, algorithms of drug delivery and chemo/radio treatment. Vimentin and detyrosinated microtubules provide structural support for the extensive microtentacles observed in detached tumor cells and a mechanism to promote successful metastatic spread. Primary colorectal carcinomas display aberrant expression of vimentin, and have activated Notch and TGFbeta signaling pathways. Vimentin is a strong arterial substrate for transglutaminases. Transglutaminase-mediated vimentin dimerization results in a novel unifying pathway by which vasodilatory and remodeling responses may be regulated. Ablation of vimentin expression inhibits migration and invasion of colon and breast cancer cell lines. Vimentin is the main intermediate filament protein in mesenchymal cells and is therefore of value in the differential diagnosis of undifferentiated neoplasms.

Vimentin Human Recombinant is produced in E.Coli, having a molecular weight of 53,685 dalton (calculated from sequence), 57,000 dalton (determined by SDS gel electrophoresis).

Physical Appearance

Sterile Filtered White lyophilized (freeze-dried) powder.

Purity

Greater than 95.0% as determined by SDS-gel electrophoresis

Formulation

The protein (1mg/ml) was lyophilized with 30mM Tris/HCL, pH 8, 9.5M urea, 2mM EDTA, 2mM DTT 10mM methylammonium chloride.

Reconstitution

It is recommended to reconstitute the Vimentin in sterile 18MΩ-cm H₂O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.

Stability

Lyophilized Vimentin although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution Vimentin should be stored at 4°C between 2-7 days and for future use below -18°C.

For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.