Rabbit Anti-phospho-Vimentin (Ser55) antibody

SL12757R

Product Name: phospho-Vimentin (Chinese Name: 磷酸化波形蛋白抗	
	体
	S55); p-Vimentin (phospho S55); CTRCT30; Epididymis luminal 05; HEL113; VIM; VIME_HUMAN; vimentin.
Organism Species: Rabbit	
Clonality: Polyclonal	
React Species: Human, Horse,	
WB=1:500-2000EL	ISA=1:500-1000
Applications: not yet tested in othe	er applications.
optimal dilutions/co	ncentrations should be determined by the end user.
Molecular weight: 57kDa	
Cellular localization: cytoplasmic	
Form: Lyophilized or Liqu	id
Concentration: 1mg/ml	
. KLH conjugated syn	thesised phosphopeptide derived from human Vimentin around the
immunogen: phosphorylation site	of Ser55:YA(p-S)SP
Lsotype: IgG	
Purification: affinity purified by 1	Protein A
Storage Buffer: 0.01M TBS(pH7.4)	with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Store at -20 °C for c	ne year. Avoid repeated freeze/thaw cycles. The lyophilized
antibody is stable at	room temperature for at least one month and for greater than a year
	When reconstituted in sterile pH 7.4 0.01M PBS or diluent of
antibody the antibod	y is stable for at least two weeks at 2-4 °C.
PubMed: PubMed	
This gene encodes a	member of the intermediate filament family. Intermediate
filamentents, along	with microtubules and actin microfilaments, make up the
	otein encoded by this gene is responsible for maintaining cell
	e cytoplasm, and stabilizing cytoskeletal interactions. It is also
	une response, and controls the transport of low-density lipoprotein



(LDL)-derived cholesterol from a lysosome to the site of esterification. It functions as an organizer of a number of critical proteins involved in attachment, migration, and cell signaling. Mutations in this gene causes a dominant, pulverulent cataract.[provided by RefSeq, Jun 2009]

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.

Subcellular Location: Cytoplasm.

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.

Post-translational modifications:

Filament disassembly during mitosis is promoted by phosphorylation at Ser-55 as well as by nestin (By similarity). 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.

DISEASE:

Cataract 30;

The disease is caused by mutations affecting the gene represented in this entry. Disease description:An opacification of the crystalline lens of the eye that frequently results in visual impairment or blindness. Opacities vary in morphology, are often confined to a portion of the lens, and may be static or progressive. In general, the more posteriorly located and dense an opacity, the greater the impact on visual function.

Similarity:

Belongs to the intermediate filament family.

SWISS: P08670

Gene ID: 7431

Database links:

Entrez Gene: 7431 Human

Entrez Gene: 22352 Mouse

Entrez Gene: 81818 Rat

Omim: 193060 Human

SwissProt: P08670 Human

piotecn.com SwissProt: P20152 Mouse

SwissProt: P31000 Rat

Unigene: 455493 Human

Unigene: 691131 Human

Unigene: 268000 Mouse

Unigene: 2710 Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

