

Vigilin (H-165): sc-134858

BACKGROUND

Vigilin, a K homology (KH) protein, is found in the nucleus and cytoplasm of all eukaryotic species. Vigilin contains a unique structure of 14 to 15 consecutively arranged KH domains, which function to mediate RNA-protein binding. Expression of the gene encoding Vigilin, which maps to chromosome 2q37.3, is essential for cell viability. Vigilin is active in heterochromatin formation and cytoplasmic mRNA decay, and can be a useful marker for translational activity. The 80S ribosome co-localizes with Vigilin, which interacts with the ribosomal complex through its C-terminal domain, suggesting its role in the link between tRNA-export and the channeled tRNA-cycle on ribosomes. Intracellular cholesterol upregulates Vigilin expression, and the protein specifically binds to high density lipoprotein molecules to function in the removal of excess cellular cholesterol.

REFERENCES

1. McKnight, G.L., et al. 1992. Cloning and expression of a cellular high density lipoprotein-binding protein that is upregulated by cholesterol loading of cells. *J. Biol. Chem.* 267: 12131-12141.
2. Xia, Y.R., et al. 1993. Localization of the gene for high-density lipoprotein binding protein (HDLBP) to human chromosome 2q37. *Genomics* 16: 524-525.

CHROMOSOMAL LOCATION

Genetic locus: HDLBP (human) mapping to 2q37.3; Hdlbp (mouse) mapping to 1 D.

SOURCE

Vigilin (H-165) is a rabbit polyclonal antibody raised against amino acids 126-290 mapping near the N-terminus of Vigilin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Vigilin (H-165) is recommended for detection of Vigilin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Vigilin (H-165) is also recommended for detection of Vigilin in additional species, including porcine.

Suitable for use as control antibody for Vigilin siRNA (h): sc-61788, Vigilin siRNA (m): sc-61789, Vigilin shRNA Plasmid (h): sc-61788-SH, Vigilin shRNA Plasmid (m): sc-61789-SH, Vigilin shRNA (h) Lentiviral Particles: sc-61788-V and Vigilin shRNA (m) Lentiviral Particles: sc-61789-V.

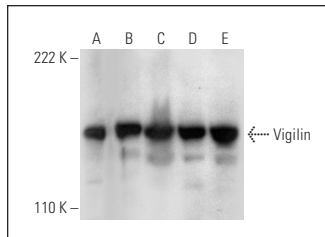
Molecular Weight of Vigilin: 155 kDa.

Positive Controls: Vigilin (m2): 293T Lysate: sc-124559, K-562 whole cell lysate: sc-2203 or HeLa whole cell lysate: sc-2200.

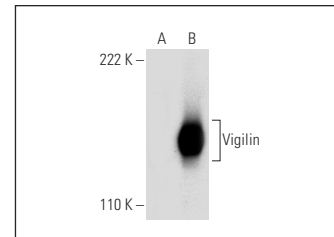
RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Vigilin (H-165): sc-134858. Western blot analysis of Vigilin expression in HeLa (A), Hep G2 (B), RAW 264.7 (C), PC-12 (D) and NIH/3T3 (E) whole cell lysates.



Vigilin (H-165): sc-134858. Western blot analysis of Vigilin expression in non-transfected: sc-117752 (A) and mouse Vigilin transfected: sc-124561 (B) 293T whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.



Try **Vigilin (H-3): sc-271523**, our highly recommended monoclonal alternative to Vigilin (H-165).