



**SZABO
SCANDIC**

Part of Europa Biosite

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!



Lieferung & Zahlungsart

siehe unsere [Liefer- und Versandbedingungen](#)

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

linkedin.com/company/szaboscandic



Vigilin (h2): 293T Lysate: sc-171057

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. Intra-cellular 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.
3. Plenz, G., et al. 1994. The human Vigilin gene: identification, chromosomal localization and expression pattern. *Hum. Genet.* 93: 575-582.
4. Kügler, S., et al. 1996. Two additional 5' exons in the human Vigilin gene distinguish it from the chicken gene and provide the structural basis for differential routes of gene expression. *Eur. J. Biochem.* 238: 410-417.
5. Kügler, S., et al. 1996. Vigilin contains a functional nuclear localisation sequence and is present in both the cytoplasm and the nucleus. *FEBS Lett.* 382: 330-334.
6. Dodson, R.E., et al. 1997. Vigilin, a ubiquitous protein with 14 K homology domains, is the estrogen-inducible vitellogenin mRNA 3'-untranslated region-binding protein. *J. Biol. Chem.* 272: 12249-12252.
7. Chiu, D.S., et al. 1998. High-density lipoprotein-binding protein (HBP)/Vigilin is expressed in human atherosclerotic lesions and co-localizes with apolipoprotein E. *Arterioscler. Thromb. Vasc. Biol.* 17: 2350-2358.
8. Kanamori, H., et al. 1998. *In vitro* genetic analysis of the RNA binding site of Vigilin, a multi-KH-domain protein. *Mol. Cell. Biol.* 18: 3991-4003.
9. Cunningham, K.S., et al. 2000. Vigilin binding selectively inhibits cleavage of the vitellogenin mRNA 3'-untranslated region by the mRNA endonuclease polysomal ribonuclease 1. *Proc. Natl. Acad. Sci. USA* 97: 12498-12502.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: HDLBP (human) mapping to 2q37.3.

PRODUCT

Vigilin (h2): 293T Lysate represents a lysate of human Vigilin transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Vigilin (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Vigilin antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

RESEARCH USE

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