

VIPL (A-4): sc-514840

BACKGROUND

Lectin mannose-binding 1, also designated vesicular integral-membrane protein (VIP36), and lectin mannose-binding 2, also designated ERGIC-53, comprise a family of membrane bound, ubiquitously expressed proteins involved in the selective transport of newly synthesized glycoproteins from the endoplasmic reticulum to the ER-Golgi intermediate compartment. VIPL (VIP36-like protein), also known as LMAN2L (lectin, mannose-binding 2-like), is a 348 amino acid single-pass type I membrane protein that localizes to the endoplasmic reticulum and Golgi apparatus. Containing one L-type lectin-like domain, VIPL is highly expressed in skeletal muscle and kidney, and is found at intermediate levels in heart, liver and placenta, and low levels in brain, thymus, spleen, small intestine and lung. VIPL is suggested to be involved in the regulation of export from the endoplasmic reticulum of a subset of glycoproteins. VIPL may function as a regulator of ERGIC-53. VIPL exists a two alternatively spliced isoforms.

REFERENCES

- Schindler, R., et al. 1993. ERGIC-53, a membrane protein of the ER-Golgi intermediate compartment, carries an ER retention motif. *Eur. J. Cell Biol.* 61: 1-9.
- Kappeler, F., et al. 1994. A dual role for COOH-terminal lysine residues in pre-Golgi retention and endocytosis of ERGIC-53. *J. Biol. Chem.* 269: 6279-6281.
- Hauri, H.P., et al. 2002. Lectins and protein traffic early in the secretory pathway. *Biochem. Soc. Symp.* 69: 73-82.
- Neve, E.P., et al. 2003. VIPL, a VIP36-like membrane protein with a putative function in the export of glycoproteins from the endoplasmic reticulum. *Exp. Cell Res.* 288: 70-83.

CHROMOSOMAL LOCATION

Genetic locus: LMAN2L (human) mapping to 2q11.2.

SOURCE

VIPL (A-4) is a mouse monoclonal antibody raised against amino acids 282-348 mapping at the C-terminus of VIPL of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

VIPL (A-4) is available conjugated to agarose (sc-514840 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-514840 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-514840 PE), fluorescein (sc-514840 FITC), Alexa Fluor® 488 (sc-514840 AF488), Alexa Fluor® 546 (sc-514840 AF546), Alexa Fluor® 594 (sc-514840 AF594) or Alexa Fluor® 647 (sc-514840 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-514840 AF680) or Alexa Fluor® 790 (sc-514840 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

VIPL (A-4) is recommended for detection of VIPL of human origin by Western Blotting (starting dilution 1:100, 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).

Suitable for use as control antibody for VIPL siRNA (h): sc-94296, VIPL shRNA Plasmid (h): sc-94296-SH and VIPL shRNA (h) Lentiviral Particles: sc-94296-V.

Molecular Weight of VIPL: 32 kDa.

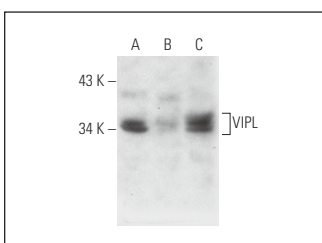
Positive Controls: Caki-1 cell lysate: sc-2224, RT-4 whole cell lysate: sc-364257 or U-251-MG whole cell lysate: sc-364176.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

- Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.
- Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).
- Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



VIPL (A-4): sc-514840. Western blot analysis of VIPL expression in Caki-1 (A), RT-4 (B) and U-251-MG (C) 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 for detailed protocols and support products.