

VIP36 (V-20): sc-32441

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, ubiquitous proteins involved in the selective transport of newly synthesized glycoproteins from the endoplasmic reticulum (ER) to the ER-Golgi intermediate compartment (ERGIC). VIP36 acts as an intracellular lectin in the early secretory pathway. It is involved in the sorting and transport of glycoproteins carrying high mannose-type glycans. ERGIC-53, a mannose-specific lectin, recognizes sugar residues of glycoproteins and glycolipids. It mediates the sorting and recycling of proteins and/or lipids. Null expression of ERGIC-53, also designated LMAN1, results in a rare autosomal recessive bleeding disorder that causes combined deficiency of both coagulation factors V and VIII.

REFERENCES

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2. 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.
3. Hauri, H.P., et al. 2002. Lectins and protein traffic early in the secretory pathway. *Biochem. Soc. Symp.* 69: 73-82.
4. Cunningham, M.A., et al. 2003. LMAN1 is a molecular chaperone for the secretion of coagulation factor VIII. *J. Thromb. Haemost.* 1: 2360-2367.
5. Hara-Kuge, S., et al. 2004. The binding of VIP36 and α -Amylase in the secretory vesicles via high-mannose type glycans. *Glycobiology* 14: 739-744.
6. Kamiya, Y., et al. 2005. Sugar-binding properties of VIP36, an intracellular animal lectin operating as a cargo receptor. *J. Biol. Chem.* 280: 37178-37182.
7. Neve, E.P., et al. 2005. Oligomerization and intercellular localization of the glycoprotein receptor ERGIC-53 is independent of disulfide bonds. *J. Mol. Biol.* 354: 556-568.

CHROMOSOMAL LOCATION

Genetic locus: LMAN2 (human) mapping to 5q35.3; lman2 (mouse) mapping to 13 B1.

SOURCE

VIP36 (V-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of VIP36 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-32441 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

VIP36 (V-20) is recommended for detection of VIP36 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

VIP36 (V-20) is also recommended for detection of VIP36 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for VIP36 siRNA (h): sc-45242, VIP36 siRNA (m): sc-45243, VIP36 shRNA Plasmid (h): sc-45242-SH, VIP36 shRNA Plasmid (m): sc-45243-SH, VIP36 shRNA (h) Lentiviral Particles: sc-45242-V and VIP36 shRNA (m) Lentiviral Particles: sc-45243-V.

Molecular Weight of VIP36: 36 kDa.

Positive Controls: NRK whole cell lysate: sc-364197.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Klein-Scory, S., et al. 2010. Immunoscreening of the extracellular proteome of colorectal cancer cells. *BMC Cancer* 10: 70.

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 **VIP36 (264C4a): sc-130026**, our highly recommended monoclonal alternative to VIP36 (V-20).