

v-SNARE Ykt6p (E-2): sc-365732

BACKGROUND

Membrane traffic in eukaryotic cells requires the interaction of a vesicle-associated soluble N-ethylmaleimide-sensitive fusion (NSF) attachment protein receptor (v-SNARE) on transport vesicles with a SNARE on the target membrane (t-SNARE). Both v- and t-SNAREs are compartment-specific and bind each other directly and specifically. The v-SNAREs Ykt6p and Vti1p are involved in ER-Golgi and intra-Golgi membrane trafficking. For v-SNARE Ykt6p, membrane interaction is mediated through a cysteine/aliphatic/aliphatic/methionine or histidine (CAAX) C-terminal motif, a consensus sequence involved in prenylated membrane anchoring. The v-SNARE Vti1p interacts with the prevacuolar t-SNARE Pep12p in Golgi prevacuolar transport and with the *cis*-Golgi t-SNARE Sed5p in traffic to the *cis*-Golgi.

CHROMOSOMAL LOCATION

Genetic locus: YKT6 (human) mapping to 7p13; Ykt6 (mouse) mapping to 11 A1.

SOURCE

v-SNARE Ykt6p (E-2) is a mouse monoclonal antibody raised against amino acids 1-198 representing full length v-SNARE Ykt6p of human origin.

PRODUCT

Each vial contains 200 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

v-SNARE Ykt6p (E-2) is available conjugated to agarose (sc-365732 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365732 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365732 PE), fluorescein (sc-365732 FITC), Alexa Fluor® 488 (sc-365732 AF488), Alexa Fluor® 546 (sc-365732 AF546), Alexa Fluor® 594 (sc-365732 AF594) or Alexa Fluor® 647 (sc-365732 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365732 AF680) or Alexa Fluor® 790 (sc-365732 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

v-SNARE Ykt6p (E-2) is recommended for detection of v-SNARE Ykt6p of mouse, rat and 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 v-SNARE Ykt6p siRNA (h): sc-41342, v-SNARE Ykt6p siRNA (m): sc-41343, v-SNARE Ykt6p shRNA Plasmid (h): sc-41342-SH, v-SNARE Ykt6p shRNA Plasmid (m): sc-41343-SH, v-SNARE Ykt6p shRNA (h) Lentiviral Particles: sc-41342-V and v-SNARE Ykt6p shRNA (m) Lentiviral Particles: sc-41343-V.

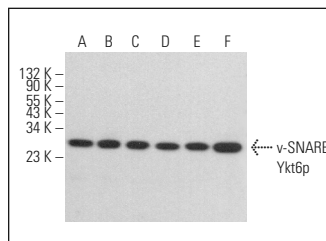
Molecular Weight of v-SNARE Ykt6p: 25 kDa.

Positive Controls: NIH/3T3 whole cell lysate: sc-2210, C6 whole cell lysate: sc-364373 or IMR-32 cell lysate: sc-2409.

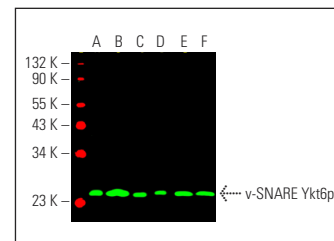
STORAGE

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

DATA



v-SNARE Ykt6p (E-2): sc-365732. Western blot analysis of v-SNARE Ykt6p expression in MH-S (A), NIH/3T3 (B), EOC 20 (C), C6 (D), IMR-32 (E) and F9 (F) whole cell lysates.



v-SNARE Ykt6p (E-2) Alexa Fluor® 680: sc-365732 AF680. Direct near-infrared western blot analysis of v-SNARE Ykt6p expression in NIH/3T3 (A), EOC 20 (B), C6 (C), IMR-32 (D), F9 (E) and MH-S (F) whole cell lysates. Blocked with UltraCruz® Blocking Reagent: sc-516214. Cruz Marker™ Molecular Weight Standards detected with Cruz Marker™ MW Tag-Alexa Fluor® 790: sc-516731.

SELECT PRODUCT CITATIONS

- Matsui, T., et al. 2018. Autophagosomal Ykt6 is required for fusion with lysosomes independently of Syntaxin 17. *J. Cell Biol.* 217: 2633-2645.
- Saito, Y., et al. 2019. LLGL2 rescues nutrient stress by promoting leucine uptake in ER⁺ breast cancer. *Nature* 569: 275-279.
- Shirakawa, R., et al. 2020. A SNARE geranylgeranyltransferase essential for the organization of the Golgi apparatus. *EMBO J.* 39: e104120.
- Lee, S.B., et al. 2021. Tumor suppressor miR-584-5p inhibits migration and invasion in smoking related non-small cell lung cancer cells by targeting YKT6. *Cancers* 13: 1159.
- Wu, W., et al. 2021. TNF-induced necroptosis initiates early autophagy events via RIPK3-dependent AMPK activation, but inhibits late autophagy. *Autophagy* 17: 3992-4009.
- Stojkowska, I., et al. 2022. Rescue of α -synuclein aggregation in Parkinson's patient neurons by synergistic enhancement of ER proteostasis and protein trafficking. *Neuron* 110: 436-451.e11.
- Buchacher, T., et al. 2022. Persistent coxsackievirus B1 infection triggers extensive changes in the transcriptome of human pancreatic ductal cells. *iScience* 25: 103653.
- Li, T., et al. 2022. Kans1 haploinsufficiency impairs autophagosome-lysosome fusion and links autophagic dysfunction with Koolen-de Vries syndrome in mice. *Nat. Commun.* 13: 931.
- Oe, Y., et al. 2022. PACSIN1 is indispensable for amphisome-lysosome fusion during basal autophagy and subsets of selective autophagy. *PLoS Genet.* 18: e1010264.

RESEARCH USE

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