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OriGene EU

SM7094

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Polyclonal Antibody to Syntaxin 13 - Purified

Alternate names: Early Endosome Marker

Catalog No.: SM7094

Quantity: 0.1 mg

Concentration: 1.0 mg/ml

Background: Syntaxin 13 is an integral membrane protein that belongs to the t-SNARE family, a group of

proteins involved in protein transport (1). Confocal immunofluoresence and electron microscopy studies have shown that syntaxin 13 is primarily localized to tubular early and recycling endosomes, where it colocalizes with transferrin receptor, and it is also localized in endosomal vacuoles (2). Syntaxin 13 has been found to be expressed in all tissues, with

higher levels of the protein found in brain, lung, spleen, thymus and testes (2).

Immunoprecipitation studies show that syntaxin 13 complexes with beta-SNAP, VAMP2/3, and SNAP25 (2). The binding of this complex to alpha-SNAP and NSF is terminated in the presence of ATP (2). These results suggest that syntaxin 13 is a SNARE protein which mediates the recycling protein flow through tubulo-vesicular recycling endosomes (2).

Host / Isotype: Mouse / IgG

Immunogen: Recombinant cytoplasmic domain of rat syntaxin 13 (1)

Format: State: Liquid Ig fraction

Purification: Protein G Chromatography

Buffer System: PBS, 0.1 mM PMSF and 50 % glycerol

Applications: Western blot analysis: 0.1 μg/ml.

Recommended Positive Control: mouse or rat brain.

Other applications not tested. Optimal dilutions are dependent on conditions and should

be determined by the user.

Specificity: Identifies recombinant rat syntaxin 13 and detects an ~38 kDa protein in immunoblots.

Additional bands of 27 and 37 kDa may also be recognized in these lysates, and are

believed to correspond to degradation products of syntaxin 13.

Species: Mouse, Rat, Dog, Hamster.

Other species not tested.

Storage: Store the antibody at 2 - 8 °C up to one month or (in aliquots) at -20 °C for longer. Avoid

repeated freezing and thawing. Centrifuge vial before opening. Shelf life: one year from despatch.

General Readings: 1. Advani, R.J., et al. (1998) J. Biol. Chem. 273: 10317-10324.

2. Prekeris, R., Klumperman, J., Chen, Y.A. and Scheller, R.H. (1998) J. Cell Biol. 143:

957-971.

3. Huang, L; Kuo, YM; Gitschier, J; (1999) Nat Genet 23(3): 329-332.

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Pictures:

Western blot analysis of syntaxin 13 in (A) mouse and (B) rat brain using SM7094 at $1 \mu g/ml$.

