Store at -20°C

Phospho-Syntaxin 17 (Ser202) Antibody

#28630

Support: +1-978-867-2388 (U.S.)
www.cellsignal.com/support

Orders: 877-616-2355 (U.S.)
orders@cellsignal.com

New 07/19

Entrez-Gene ID #55014
UniProt ID #P56962

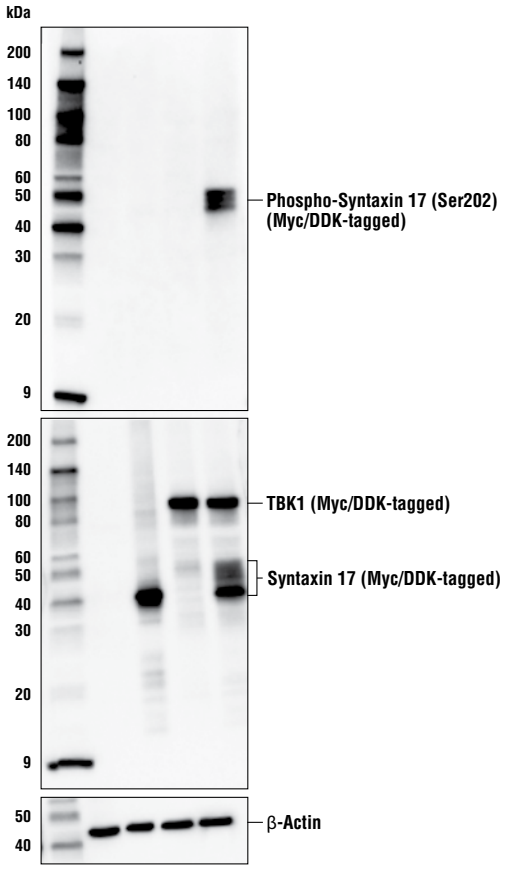
For Research Use Only. Not For Use In Diagnostic Procedures.

Applications	Species Cross-Reactivity*	Molecular Wt.	Source
W Transfected Only	H, (M, R)	40-42 kDa	Rabbit**

Background: Autophagy is a catabolic process for the autophagosomic-lysosomal degradation of bulk cytoplasmic contents (1,2). Autophagy is generally activated by conditions of nutrient deprivation but has also been associated with a number of physiological processes including development, differentiation, neurodegeneration, infection, and cancer (3). Syntaxin 17/STX17 is a SNARE factor recruited to autophagosomes and required for autophagosome fusion to lysosomes. Syntaxin 17 interacts with SNAP29 (Qbc-SNARE synaptosome-associated protein 29) and the lysosomal factor VAMP8 (R-SNARE vesicle-associated membrane protein 8), as well as BRUCE, an inhibitor of apoptosis (IAP) protein, which is also involved in autophagosome/lysosome fusion (4,5). Syntaxin 17 promotes initiation of PINK1/Parkin-independent mitophagy, which is regulated by depletion of the mitochondrial outer membrane protein Fis1 (6). Phosphorylation of Syntaxin 17 at Ser202 by TBK1 promotes the formation of the mammalian pre-autophagosomal structure (mPAS) and interaction with core components Atg13 and FIP200.

Specificity/Sensitivity: Phospho-Syntaxin 17 (Ser202) Antibody recognizes transfected levels of syntaxin 17 protein only when phosphorylated at Ser202.

Source/Purification: Polyclonal antibodies are produced by immunizing animals with a synthetic phospho-peptide corresponding to residues surrounding Ser202 of human syntaxin 17 protein. Antibodies were purified by peptide affinity chromatography.



Western blot analysis of extracts from 293T cells, mock transfected (-) or transfected with constructs expresssing Myc/DDK-tagged human syntaxin 17 (hSTX17-Myc/DDK; +) and Myc/DDK-tagged human TBK1 (hTBK1-Myc/DDK; +), using Phospho-Syntaxin 17 (Ser202) Antibody (upper), Myc-Tag (71D10) Rabbit mAb #2278 (middle), or β-Actin (D6A8) Rabbit mAb #8457 (lower).

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. *Do not aliquot the antibody.*

***Species cross-reactivity is determined by western blot.**

****Anti-rabbit secondary antibodies must be used to detect this antibody.**

Recommended Antibody Dilutions:

Western blotting	1:1000

For product specific protocols and a complete listing of recommended companion products please see the product web page at www.cellsignal.com.

Background References:

(1) Reggiori, F. and Klionsky, D.J. (2002) *Eukaryot Cell* 1, 11-21.

(2) Codogno, P. and Meijer, A.J. (2005) *Cell Death Differ* 12 Suppl 2, 1509-18.

(3) Levine, B. and Yuan, J. (2005) *J Clin Invest* 115, 2679-88.

(4) Viret, C. and Faure, M. (2019) *Trends Cell Biol* 29, 1-3.

(5) Corona, A.K. and Jackson, W.T. (2018) *Trends Cell Biol* 28, 869-81.

(6) Xian, H. et al. (2019) *Nat Commun* 10, 2059.

(7) Kumar, S. et al. (2019) *Dev Cell* 49, 130-144.e6.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.

Thank you for your recent purchase. If you would like to provide a review visit cellsignal.com/comments.

www.cellsignal.com

Applications: **W**—Western **IP**—Immunoprecipitation **IHC**—Immunohistochemistry **ChIP**—Chromatin Immunoprecipitation **IF**—Immunofluorescence **F**—Flow cytometry **E-P**—ELISA-Peptide **Species Cross-Reactivity:** **H**—human **M**—mouse **R**—rat **Hm**—hamster **Mk**—monkey **Mi**—mink **C**—chicken **Dm**—D. melanogaster **X**—Xenopus **Z**—zebrafish **B**—bovine **Dg**—dog **Pg**—pig **Sc**—S. cerevisiae **Ce**—C. elegans **Hr**—Horse **All**—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.