Synaptic Systems

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TEV-cut site

Cat.No. 265 003CpH; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen, fluorescence-labeled with CypHer5E. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H_2O to get a 1mg/ml solution in PBS. Either add 1:1 (v/v) glycerol, then aliquot and store at -20°C until use, or store aliquots at -80°C without additives. Reconstitute immediately upon receipt! Avoid bright light when working with the antibody to minimize photo bleeching of the fluorescent dye.
Applications	**WB**: N/A **IP**: N/A **ICC**: 1 : 500 **IHC**: not tested yet **IHC-P/FFPE**: not tested yet
Label	CypHer5E
Immunogen	Synthetic peptide corresponding to AA 1 to 6 from TEV-cut site
Specificity	TEV-cut protease site is recognized with very strong preference.
Remarks	Excess of extracellular membrane bound SynaptoPhluorin is often removed by TEV protease digestion. This antibody recognizes the neoepitopes generated by TEV cleavage and can be used for membrane internalization studies. The pH sensitive dye regaines its fluorescence after the reacidification of the synaptic vesicle lumen.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

TEV is a highly specific cysteine protease derived from **T**obacco **E**tch **V**irus (**TEV**). The optimum recognition site for this enzyme is the sequence (ENLYFQ(G/S)) and cleavage occurs between the Q and G/S residues leaving a free carboxy-terminus.

Selected General References

Tobacco etch virus protease retains its activity in various buffers and in the presence of diverse additives.
Sun C, Liang J, Shi R, Gao X, Zhang R, Hong F, Yuan Q, Wang S
Protein expression and purification (2012) 82(1): 226-31.

Exploring the activity of tobacco etch virus protease in detergent solutions.
Lundbäck AK, van den Berg S, Hebert H, Berglund H, Eshaghi S
Analytical biochemistry (2008) 382(1): 69-71.

Structural basis for the substrate specificity of tobacco etch virus protease.
Phan J, Zdanov A, Evdokimov AG, Tropea JE, Peters HK, Kapust RB, Li M, Wlodawer A, Waugh DS
The Journal of biological chemistry (2002) 277(52): 50564-72.

The P1' specificity of tobacco etch virus protease.
Kapust RB, Tözsér J, Copeland TD, Waugh DS
Biochemical and biophysical research communications (2002) 294(5): 949-55.

Tobacco etch virus protease: mechanism of autolysis and rational design of stable mutants with wild-type catalytic proficiency.
Kapust RB, Tözsér J, Fox JD, Anderson DE, Cherry S, Copeland TD, Waugh DS
Protein engineering (2001) 14(12): 993-1000.