



**PhosphoSolutions®**  
Antibodies that work™

Colorado Biosciences Park  
12635 East Montview Boulevard, #213  
Aurora, CO 80045-7337  
Tel: (888) 442-7100

## Anti-Clavesin 1/2

**Catalog Number:** 317-CLAV      **Size:** 100 µL

**Product Description:** Affinity purified rabbit polyclonal antibody

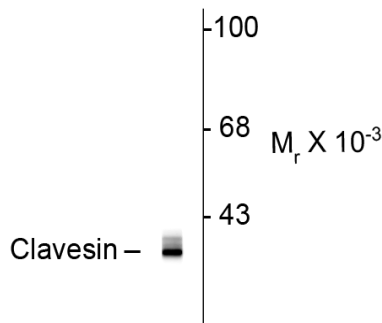
**Applications:**    **WB:** 1:1,000    **ICC:** 1:50

**Antigen:** Synthetic peptide taken from the C-terminus of rat clavesin 1.

**Species reactivity:** The antibody has been directly tested for reactivity in rat. It is anticipated that the antibody will also work in human and mouse as there is 100% homology in these species with the amino acid sequence used as antigen.

**Biological Significance:** Clavesin (clathrin vesicle associated Sec14 protein) is a novel neuron specific protein that has recently been identified and shown to be required for normal morphology of late endosomes and/or lysosomes as lentiviral-mediated knockdown of clavesin in hippocampal neurons causes lysosomal defects (Kato et al., 2009). Additionally, upregulation of clavesin in human hepatocellular carcinoma has recently been demonstrated thus making it a useful marker for this disease state (Zhao et al., 2008).

### Anti-Clavesin 1/2



**Western blot** of rat hippocampal homogenate showing specific immunolabeling of the ~ 35k clavesin protein.

**Purification Method:** Prepared from serum by affinity purification using a column to which the peptide antigen was coupled.

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**WB** = Western Blot    **IF** = Immunofluorescence    **IHC** = Immunohistochemistry    **IP** = Immunoprecipitation

**Packaging:** 100 µl in PBS + 50% glycerol.

**Storage and Stability:** Store at -20°C in undiluted aliquots; stable for at least 1 year after date of receipt. Avoid freeze/thaw cycles.

**Shipment:** Domestic - Blue Ice; International - Blue Ice or Dry Ice.

**For Research Use Only. Not for diagnostic use.**

**Antibody Specificity:** Specific for the ~ 35 kDa clavesin 1/2 protein doublet in Western blots of rat brain lysate. Isoform-specific knock down in cultured hippocampal neurons indicates that the lower and upper bands are clavesin 1 and 2, respectively.

**Quality Control Tests:** Western blots performed on each lot.

**References:**

Yohei Katoh, Brigitte Ritter, Thomas Gaffry, Francois Blondeau, Stefan Höning and Peter S. McPherson (2009) the clavesin family: neuron-specific lipid- and clathrin-binding Sec14 proteins regulating lysosomal morphology. *Journal of Biological Chemistry* Oct 2;284(40):27646-54.

Zhao S, Xu C, Qian H, Lv L, Ji C, Chen C, Zhao X, Zheng D, Gu S, Xie Y, Mao Y (2008) Cellular retinaldehyde-binding protein-like (CRALBPL), a novel human Sec14p-like gene that is upregulated in human hepatocellular carcinomas, may be used as a marker for human hepatocellular carcinomas. *DNA Cell Biol.* Mar; 27(3):159-63.

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