

CAPS 2

Cat.No. 262 103; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H ₂ O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	WB: 1 : 500 up to 1 : 1000 IP: not tested yet ICC: not tested yet IHC: yes IHC-P/FFPE: not tested yet
Immunogen	Recombinant protein corresponding to AA 15 to 89 from mouse CAPS2 (UniProt Id: Q8BYR5)
Reactivity	Reacts with: mouse (Q8BYR5). Other species not tested yet.
Specificity	Specific for CAPS 2, no cross-reactivity to CAPS 1 (K.O. verified)

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

The **Ca²⁺**-dependent activator protein for secretion (CAPS) regulates exocytosis of catecholamine- or neuropeptide-containing dense-core vesicles (DCVs) at secretion sites. Two different isoforms CAPS 1/CADPS 1 and **CAPS 2/CADPS 2** that are mainly expressed in brain have been identified in mammals. Both have been shown to be essential components of the synaptic vesicle priming machinery.

Selected References SYSY Antibodies

Unconventional molecular regulation of synaptic vesicle replenishment in cochlear inner hair cells. Vogl C, Cooper BH, Neef J, Wojcik SM, Reim K, Reisinger E, Brose N, Rhee JS, Moser T, Wichmann C Journal of cell science (2015) 128(4): 638-44. **IHC**

Selected General References

Interaction of calcium-dependent activator protein for secretion 1 (CAPS1) with the class II ADP-ribosylation factor small GTPases is required for dense-core vesicle trafficking in the trans-Golgi network.

Sadakata T, Shinoda Y, Sekine Y, Saruta C, Itakura M, Takahashi M, Furuichi T The Journal of biological chemistry (2010) 285(49): 38710-9.

CAPS1 and CAPS2 regulate stability and recruitment of insulin granules in mouse pancreatic beta cells. Speidel D, Salehi A, Obermueller S, Lundquist I, Brose N, Renström E, Rorsman P Cell metabolism (2008) 7(1): 57-67.

Tissue distribution of Ca²⁺-dependent activator protein for secretion family members CAPS1 and CAPS2 in mice.

Sadakata T, Washida M, Morita N, Furuichi T The journal of histochemistry and cytochemistry : official journal of the Histochemistry Society (2007) 55(3): 301-11.

CAPS-1 and CAPS-2 are essential synaptic vesicle priming proteins.

Jockusch WJ, Speidel D, Sigler A, Sørensen JB, Varoqueaux F, Rhee JS, Brose N Cell (2007) 131(4): 796-808.

Differential distributions of the Ca²⁺-dependent activator protein for secretion family proteins (CAPS2 and CAPS1) in the mouse brain.

Sadakata T, Itakura M, Kozaki S, Sekine Y, Takahashi M, Furuichi T The Journal of comparative neurology (2006) 495(6): 735-53.

CAPS1 regulates catecholamine loading of large dense-core vesicles.

Speidel D, Bruederle CE, Enk C, Voets T, Varoqueaux F, Reim K, Becherer U, Fornai F, Ruggieri S, Holighaus Y, Weihe E, et al. Neuron (2005) 46(1): 75-88.