

Chromogranin A

Cat.No. 259 003; 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 : 1000 (AP staining) IP: not tested yet ICC: 1 : 500 IHC: 1 : 500 IHC-P/FFPE: 1 : 200 up to 1 : 2000
Immunogen	Recombinant protein corresponding to AA 348 to 463 from mouse Chromogranin A (UniProt Id: P26339)
Reactivity	Reacts with: rat (P10354), mouse (P26339), human (P10645). Other species not tested yet.
Specificity	Specific chromogranin A. (K.O. verified)
matching control	259-OP

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

Chromogranin A (CgA) and B (CgB) are members of a family of acidic proteins stored and released throughout the neuroendocrine system. The large dense core vesicle associated proteins have multiple functions in neurons and neuroendocrine cells. They are differentially processed in different tissues.

Chromogranin A (CgA) is the precursor for the bioactive peptides pancreastatin, vasostatins, catestatin, β-granin and WE-14.

Selected References SYSY Antibodies

Dense-core vesicle biogenesis and exocytosis in neurons lacking chromogranins A and B.
Dominguez N, van Weering JRT, Borges R, Toonen RFG, Verhage M
Journal of neurochemistry (2018) 144(3): 241-254. **WB; KO verified; tested species: mouse**

Newly produced synaptic vesicle proteins are preferentially used in synaptic transmission.
Truckenbrodt S, Viplav A, Jähne S, Vogts A, Denker A, Wildhagen H, Fornasiero EF, Rizzoli SO
The EMBO journal (2018) : . **ICC; tested species: rat**

Pool size estimations for dense-core vesicles in mammalian CNS neurons.
Persoon CM, Moro A, Nassal JP, Farina M, Broeke JH, Arora S, Dominguez N, van Weering JR, Toonen RF, Verhage M
The EMBO journal (2018) : . **IHC; tested species: mouse**

Selected General References

The functional role of chromogranins in exocytosis.

Domínguez N, Estévez-Herrera J, Pardo MR, Pereda D, Machado JD, Borges R
Journal of molecular neuroscience : MN (2012) 48(2): 317-22.

A distinct trans-Golgi network subcompartment for sorting of synaptic and granule proteins in neurons and neuroendocrine cells.

Park JJ, Gondré-Lewis MC, Eiden LE, Loh YP
Journal of cell science (2011) 124(Pt 5): 735-44.

Chromogranin B gene ablation reduces the catecholamine cargo and decelerates exocytosis in chromaffin secretory vesicles.
Díaz-Vera J, Morales YG, Hernández-Fernaudo JR, Camacho M, Montesinos MS, Calegari F, Huttner WB, Borges R, Machado JD
The Journal of neuroscience : the official journal of the Society for Neuroscience (2010) 30(3): 950-7.

Cellular distribution of chromogranin A in excitatory, inhibitory, aminergic and peptidergic neurons of the rodent central nervous system.

Schafer MK, Mahata SK, Stroth N, Eiden LE, Weihe E
Regulatory peptides (2010) 165(1): 36-44.

Chromogranins A and B as regulators of vesicle cargo and exocytosis.

Machado JD, Díaz-Vera J, Domínguez N, Alvarez CM, Pardo MR, Borges R
Cellular and molecular neurobiology (2010) 30(8): 1181-7.

The crucial role of chromogranins in storage and exocytosis revealed using chromaffin cells from chromogranin A null mouse.
Montesinos MS, Machado JD, Camacho M, Díaz J, Morales YG, Alvarez de la Rosa D, Carmona E, Castañeyra A, Viveros OH, O'Connor DT, Mahata SK, et al.

The Journal of neuroscience : the official journal of the Society for Neuroscience (2008) 28(13): 3350-8.

Chromogranin A, an "on/off" switch controlling dense-core secretory granule biogenesis.

Kim T, Tao-Cheng JH, Eiden LE, Loh YP
Cell (2001) 106(4): 499-509.

Chromogranin B (secretogranin II), a neuroendocrine-regulated secretory protein, is sorted to exocrine secretory granules in transgenic mice.

Natori S, King A, Hellwig A, Weiss U, Iguchi H, Tsuchiya B, Kameya T, Takayanagi R, Nawata H, Huttner WB
The EMBO journal (1998) 17(12): 3277-89.

Rat brain: distribution of immunoreactivity of PE-11, a peptide derived from chromogranin B.

Kroesen S, Marksteiner J, Leitner B, Hogue-Angeletti R, Fischer-Colbrie R, Winkler H
The European journal of neuroscience (1996) 8(12): 2679-89.

Structure and function of the chromogranin A gene. Clues to evolution and tissue-specific expression.

Wu HJ, Rozansky DJ, Parmer RJ, Gill BM, O'Connor DT
The Journal of biological chemistry (1991) 266(20): 13130-4.

The primary structure of bovine chromogranin A: a representative of a class of acidic secretory proteins common to a variety of peptidergic cells.

Benedum UM, Baeuerle PA, Konecki DS, Frank R, Powell J, Mallet J, Huttner WB
The EMBO journal (1986) 5(7): 1495-502.