

Basic Information

Product Name	Anti-Chromogranin A/CHGA Antibody	
Gene Name	CHGA	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Chromogranin A/CHGA recombinant protein (Position: L19-E417).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	70-80 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

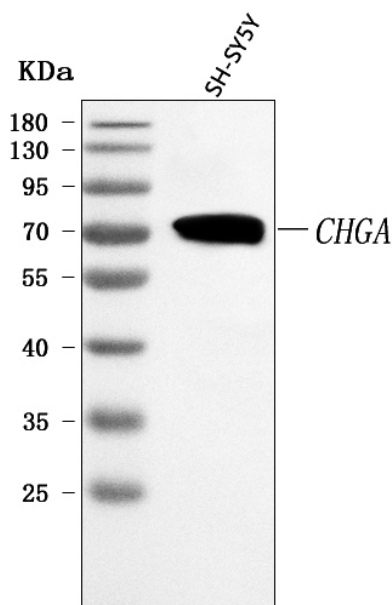
Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

CHGA, also known as CGA or chromogranin A, is an acidic protein costored and coreleased with catecholamines from storage granules in the adrenal medulla. CHGA is a member of the granin family of neuroendocrine secretory protein. It is located in secretory vesicles of neurons and endocrine cells. In humans, CHGA protein is encoded by the CHGA gene, and it is mapped to 14q32.12. CHGA gene product is a precursor to three biologically active peptides: vasostatin, pancreastatin, and parastatin. These peptides negatively modulate the neuroendocrine function of the releasing cell (autocrine) or nearby cells (paracrine).

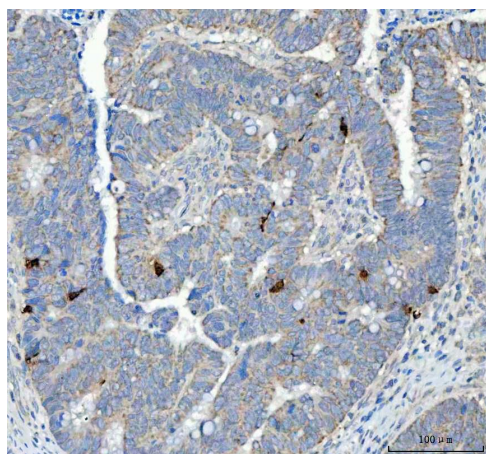
Selected Validation Data



Western blot analysis of anti-Chromogranin A/CHGA antibody (A01256-4). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

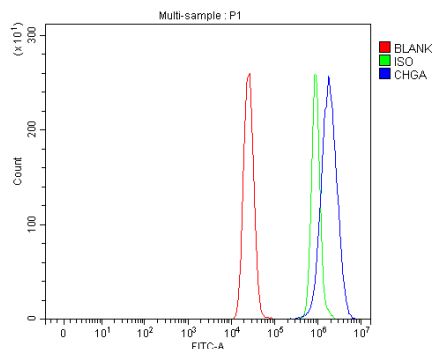
Lane 1: human SH-SY5Y whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-Chromogranin A/CHGA antigen affinity purified polyclonal antibody (A01256-4) and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for Chromogranin A/CHGA at approximately 70-80 kDa. The expected band size for Chromogranin A/CHGA is at 51 kDa.



IHC analysis of Chromogranin A/CHGA using anti-Chromogranin A/CHGA antibody (A01256-4).

Chromogranin A/CHGA was detected in a paraffin-embedded section of human colorectal adenocarcinoma tissue. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of MCF-7 cells using anti-Chromogranin A/CHGA antibody (A01256-4).

Overlay histogram showing MCF-7 cells stained with A01256-4 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Chromogranin A/CHGA Antibody (A01256-4) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.