

CHGA Antibody

Purified Mouse Monoclonal Antibody

Catalog # AO2256a

Product Information

Application	WB, FC, ICC, E
Primary Accession	P10645
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	1A6B6
Isotype	IgG1
Calculated MW	50688
Description	The protein encoded by this gene is a member of the chromogranin/secretogranin family of neuroendocrine secretory proteins. It is found in secretory vesicles of neurons and endocrine cells. This gene product is a precursor to three biologically active peptides; vasostatin, pancreastatin, and parastatin. These peptides act as autocrine or paracrine negative modulators of the neuroendocrine system. Other peptides, including chromostatin, beta-granin, WE-14 and GE-25, are also derived from the full-length protein. However, biological activities for these molecules have not been shown.
Immunogen	Purified recombinant fragment of human CHGA (AA: 87-252) expressed in E. Coli.
Formulation	Ascitic fluid containing 0.03% sodium azide.

Additional Information

Gene ID	1113
Other Names	Chromogranin-A, CgA, Pituitary secretory protein I, SP-I, Vasostatin-1, Vasostatin I, Vasostatin-2, Vasostatin II, EA-92, ES-43, Pancreastatin, SS-18, WA-8, WE-14, LF-19, AL-11, GV-19, GR-44, ER-37, CHGA
Dilution	WB~~1/500 - 1/2000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CHGA Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CHGA
Function	[Pancreastatin]: Strongly inhibits glucose induced insulin release from the pancreas. [Serpinin]: Regulates granule biogenesis in endocrine cells by up-regulating the transcription of protease nexin 1 (SERPINE2) via a cAMP-PKA-SP1 pathway. This leads to inhibition of granule protein degradation in the Golgi complex which in turn promotes granule formation.
Cellular Location	[Serpinin]: Secreted {ECO:0000250 UniProtKB:P26339}. Cytoplasmic vesicle, secretory vesicle {ECO:0000250 UniProtKB:P26339}. Note=Pyroglutaminated serpinin localizes to secretory vesicle. {ECO:0000250 UniProtKB:P26339}
Tissue Location	Detected in cerebrospinal fluid (at protein level) (PubMed:25326458). Detected in urine (at protein level) (PubMed:37453717).

References

1.Cell Signal. 2012 Jan;24(1):233-46. 2.J Endocrinol Invest. 2010 Mar;33(3):186-91.

Images

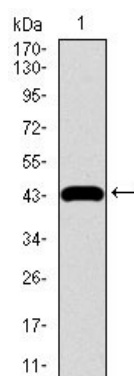


Figure 1: Western blot analysis using CHGA mAb against human CHGA recombinant protein. (Expected MW is 43.6 kDa)

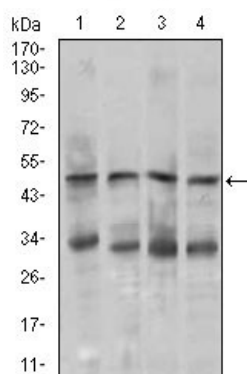


Figure 2: Western blot analysis using CHGA mouse mAb against MOLT4 (1), SK-N-SH (2), HepG2 (3), and PC-12 (4) cell lysate.

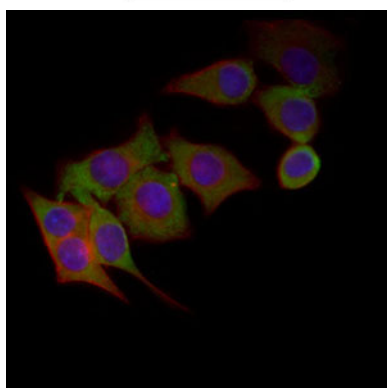


Figure 3: Immunofluorescence analysis of HepG2 cells using CHGA mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

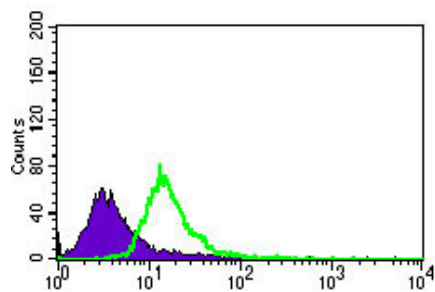


Figure 4: Flow cytometric analysis of HeLa cells using CHGA mouse mAb (green) and negative control (purple).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.