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BM5082 Monoclonal Antibody to Chromogranin A - Ascites

Alternate names: CHGA, CgA, Chromogranin-A, Pituitary secretory protein I, SP-I

Quantity: 1 ml

Background: Neurons and neuroendocrine cells contain membrane-delimited pools of peptide hormones, biogenic amines, and neurotransmitters with a characteristic electron-dense appearance. These vesicles, which are present throughout the neuroendocrine system and in a variety of neurons, store and release chromogranins and secretogranins, a unique group of acidic, soluble secretory proteins.
Chromogranin A, a protein of 439 amino acids which is encoded on chromosome 14 is present in neuroendocrine cells throughout the body, including the neuroendocrine cells of the large and small intestine, adrenal medulla and pancreatic islets. It is an excellent marker for carcinoid tumors, phenochromocytomas, paragangliomas, and other neuroendocrine tumors. Coexpression of chromogranin A and neuron specific enolase (NSE) is common in neuroendocrine neoplasms.

Uniprot ID: P10645

NCBI: NP_001266.1

GeneID: 1113

Host / Isotype: Mouse / IgG1

Clone: LK2H10

Immunogen: Isolated from Human pheochromocytoma.

Format: **State:** Liquid Ascites
Preservatives: 0.09% Sodium Azide

Applications: **Immunoblotting.**
Immunofluorescence.
Immunohistochemistry on Frozen Sections.
Immunohistochemistry on Paraffin Sections: 1/10 (In No case proteolytic pretreatment).
Recommended Positive Control: Pancreas, adrenal medulla.
Dilution Buffer: Dilute immediately before use with TBS.
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This Monoclonal antibody LK2H10 represents an excellent marker for neurohomone peptide producing cells (APUD) and for most neuroendocrine, neuronal and adrenal tumors: e.g. pheochromocytoma, paraganglioma, neuroblastoma, pancreatic islet cell carcinoma, gastroadenomas from pituitary and parathyroid gland.
Weak reaction with poorly granulated endocrine cells, Merkel cell tumors of skin and small cell lung carcinoma.
The antibody reacts with the 68 kD protein (Chromogranin A). The antigen is localized in secretory granules and, therefore, poorly granulated cells react weakly or not at all.

Species Reactivity: **Tested:** Human, Monkey, Rat, Rabbit, Pig.

Storage:

Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.
Avoid repeated freezing and thawing.
Shelf life: one year from despatch.

General Readings:

1. Lloyd RV, Wilson BS. Specific endocrine tissue marker defined by a monoclonal antibody. Science. 1983 Nov 11;222(4624):628-30. PubMed PMID: 6635661.
2. Taupenot L, Harper KL, O'Connor DT. The chromogranin-secretogranin family. N Engl J Med. 2003 Mar 20;348(12):1134-49. PubMed PMID: 12646671.
3. Wilson BS, Lloyd RV. Detection of chromogranin in neuroendocrine cells with a monoclonal antibody. Am J Pathol. 1984 Jun;115(3):458-68. PubMed PMID: 6375394.