Product Data Sheet
anti-human Chromogranin A (CGA)
monoclonal antibody

Product information

Catalog Number:	GM-0909
Clone:	NJ-5C9
Description:	purified monoclonal mouse antibody
Specificity:	anti-human Chromogranin A (CGA)
Isotype:	IgG1
Purification:	Protein G
Storage:	short term: 2°C - 8°C; long term: -20°C (avoid repeated freezing and thawing)
Buffer :	phosphate buffered saline, pH 7.2
Immunogen:	genetic immunisation with cDNA encoding CGA
Selection:	based on recognition of the complete **native protein** expressed on transfected mammalian cells

Working dilutions

Flow cytometry:	1.2 µg/10^6 cells
CELISA:	1:200 - 1:400
ELISA:	1:200 - 1:400

For each application a titration should be performed to determine the optimal concentration.

Specificity testing by flow cytometry

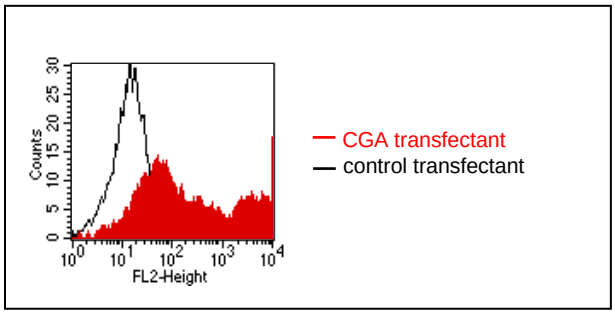

Fig.1: FACS analysis of BOSC23 cells using NJ-5C9 Cat.# GM-0909. BOSC23 cells were transiently transfected with an expression vector encoding either CGA (red curve) or an irrelevant protein (control transfectant: black curve). Binding of NJ-5C9 was detected with a PE-conjugated secondary antibody. A positive signal was obtained only with CGA transfected cells.

For research use only. Not for diagnostic or therapeutic use.

CGE analysis of NJ-5C9

The antibody was purified by protein G affinity chromatography from cell culture supernatants and verified by CGE (Fig.2).

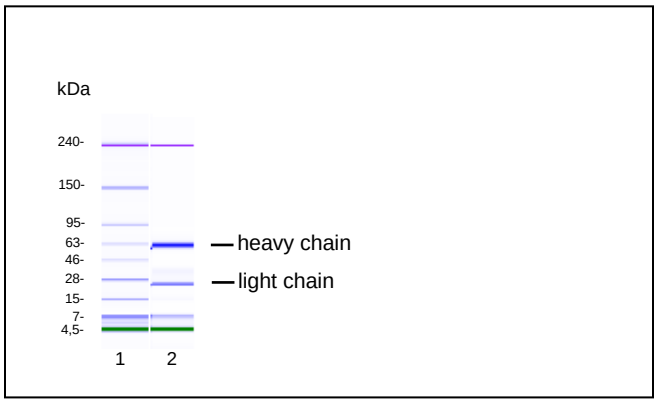

Fig.2: CGE analysis of purified NJ-5C9 monoclonal antibody. Lane 1: molecular weight marker, Lane 2: 2 µg of purified NJ-5C9 antibody. Proteins were separated by CGE (capillary gel electrophoresis, Agilent 2100 Bioanalyzer). Internal control bands (240 kDa / 7 kDa / 4.5 kDa)

Background

Chromogranin A (CgA) is a 49 kDa protein which is a member of the granin/secretogranin family of acidic glycoproteins. It is specifically expressed in all endocrine and neuroendocrine cells and plays multiple roles in the process of regulated secretion of peptide hormones and neurotransmitters (1). Owing to its over-expression in several tumors of neuroendocrine origin, CgA is of diagnostic value in classical endocrine, in hormone-negative and in neuroendocrine tumors (2).

References

1. **Hendy GN, Bevan S, Mattei MG, Mouland AJ (1995)**. Chromogranin A. *Clin Invest Med*;18(1):47-65.

2. **Deftos LJ (1991)**. Chromogranin A: its role in endocrine function and as an endocrine and neuroendocrine tumor marker. *Endocr Rev*; 12(2):181-7.