SANTA CRUZ BIOTECHNOLOGY, INC.

Calgranulin B (C-19): sc-8114

SANTA CRUZ BIOTECHNOLOGY
The Power to Question

BACKGROUND

The family of EF-hand type Ca^{2+}-binding proteins includes Calbindin (previously designated vitamin D-dependent Ca^{2+}-binding protein), S-100α and β, Calgranulins A (also designated MRP8), B (also designated MRP14) and C (S-100 like proteins), and the parvalbumin family members, including parvalbumin α and parvalbumin β (also designated oncomodulin). Calbindin, S-100 proteins and parvalbumin proteins are each expressed in neural tissues. In addition, S-100α and β are present in a variety of other tissues and Calbindin is present in intestine and kidney. Parvalbumin α is also found in fast-contracting/ relaxing skeletal muscle fibers and parvalbumin β is found in many tumor tissues, as well as in the organ of corti. Calbindin, S-100 proteins and parvalbulmins have all been detected in Leydig cells and testis. These proteins are thought to play a role in hormone production and spermatogenesis. Calgranulin is expressed in macrophages and epithelial cells.

CHROMOSOMAL LOCATION

Genetic locus: S100A9 (human) mapping to 1q21.3.

SOURCE

Calgranulin B (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of Calgranulin B of human origin.

PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-8114 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Calgranulin B (C-19) is recommended for detection of Calgranulin B of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Calgranulin B (C-19) is also recommended for detection of calgranulin B in additional species, including bovine.

Suitable for use as control antibody for Calgranulin B siRNA (h): sc-43344, Calgranulin B shRNA Plasmid (h): sc-43344-SH and Calgranulin B shRNA (h) Lentiviral Particles: sc-43344-V.

Molecular Weight of Calgranulin B: 14 kDa.

Positive Controls: HL-60 whole cell lysate: sc-2209 or HL-60 + DMSO cell lysate: sc-24703.

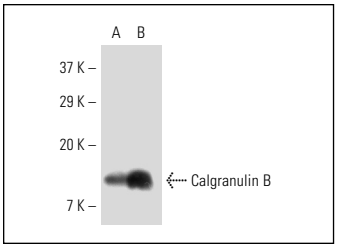
STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

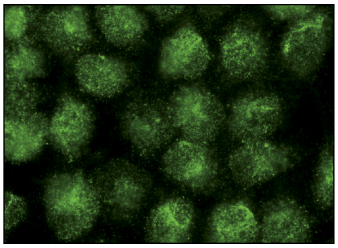
RESEARCH USE

For research use only, not for use in diagnostic procedures.

DATA



Calgranulin B (C-19): sc-8114. Western blot analysis of Calgranulin B expression in untreated (**A**) and DMSO treated HL-60 (**B**) whole cell lysates.



Calgranulin B (C-19): sc-8114. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

SELECT PRODUCT CITATIONS

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4. Bax, D.A., et al. 2007. High-grade dysplasia in Barrett's esophagus is associated with increased expression of calgranulin A and B. Scand. J. Gastroenterol. 42: 902-910.
5. Momohara, C., et al. 2009. Mechanism underlying the low prevalence of pediatric calcium oxalate urolithiasis. J. Urol. 182: 1201-1209.
6. Berglund, S.R., et al. 2009. Proteomic analysis of low dose arsenic and ionizing radiation exposure on keratinocytes. Proteomics 9: 1925-1938.
7. Hattori, N., et al. 2009. YKL-40 identified by proteomic analysis as a biomarker of sepsis. Shock 32: 393-400.
8. Curran, C.S., et al. 2011. GM-CSF production by glioblastoma cells has a functional role in eosinophil survival, activation, and growth factor production for enhanced tumor cell proliferation. J. Immunol. 187: 1254-1263.
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