

Calgranulin A (M-19): sc-8113

BACKGROUND

The family of EF-hand type Ca^{2+} -binding proteins includes Calbindin (previously designated vitamin D-dependent Ca^{2+} -binding protein), S-100 α 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-100 α 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 parvalbumins have all been detected in leydig cells and the 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: S100A8 (human) mapping to 1q21.3; S100a8 (mouse) mapping to 3 F1.

SOURCE

Calgranulin A (M-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of Calgranulin A of mouse 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-8113 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Calgranulin A (M-19) is recommended for detection of Calgranulin A of mouse, rat and 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).

Suitable for use as control antibody for Calgranulin A siRNA (h): sc-43342, Calgranulin A siRNA (m): sc-43343, Calgranulin A shRNA Plasmid (h): sc-43342-SH, Calgranulin A shRNA Plasmid (m): sc-43343-SH, Calgranulin A shRNA (h) Lentiviral Particles: sc-43342-V and Calgranulin A shRNA (m) Lentiviral Particles: sc-43343-V.

Molecular Weight of Calgranulin A: 11 kDa.

Positive Controls: mouse skin extract: sc-364251, mouse PBL whole cell lysate or Calgranulin A (h): CHO Lysate: sc-110010.

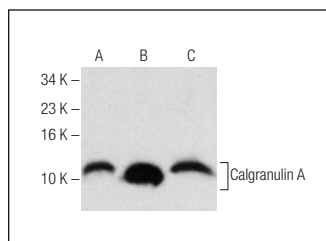
STORAGE

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

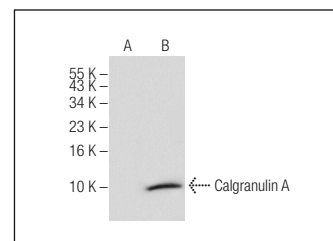
RESEARCH USE

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

DATA



Calgranulin A (M-19): sc-8113. Western blot analysis of Calgranulin A expression in human PBL (A) and mouse PBL (B) whole cell lysates and mouse skin tissue extract (C).



Calgranulin A (M-19): sc-8113. Western blot analysis of Calgranulin A expression in non-transfected: sc-117750 (A) and human Calgranulin A transfected: sc-110010 (B) CHO whole cell lysates.

SELECT PRODUCT CITATIONS

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- Yao, D., et al. 2010. Hyperglycemia-induced reactive oxygen species increase expression of the receptor for advanced glycation end products (RAGE) and RAGE ligands. *Diabetes* 59: 249-255.
- Zhang, J., et al. 2011. Novel sulfated polysaccharides disrupt cathelicidins, inhibit RAGE and reduce cutaneous inflammation in a mouse model of rosacea. *PLoS ONE* 6: e16658.
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- Taccioli, C., et al. 2012. Dietary zinc deficiency fuels esophageal cancer development by inducing a distinct inflammatory signature. *Oncogene* 31: 4550-4558.
- Xu, Y.D., et al. 2012. Proteomic analysis reveals the deregulation of inflammation-related proteins in acupuncture-treated rats with asthma onset. *Evid. Based Complement. Alternat. Med.* 2012: 850512.
- Schonthaler, H.B., et al. 2013. S100A8-S100A9 protein complex mediates psoriasis by regulating the expression of complement factor C3. *Immunity* 39: 1171-1181.

MONOS
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Try **Calgranulin A (C-10): sc-48352** or **Calgranulin A (MRP8 2C5/4): sc-53184**, our highly recommended monoclonal alternatives to Calgranulin A (M-19). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **Calgranulin A (C-10): sc-48352**.