## .-online.com antibodies

# Datasheet for ABIN2192016 anti-Calprotectin antibody

4 Publications



Overview

Quantity:	100 µg
Target:	Calprotectin (S100A8/A9)
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Calprotectin antibody is un-conjugated
Application:	Western Blotting (WB), Flow Cytometry (FACS), High Pressure Liquid Chromatography (HPLC)

### Product Details

Clone:	27E10
lsotype:	lgG1
Cross-Reactivity (Details):	Cross reactivity: Mouse : No, Rhesus Monkey : Yes (subpopulation of macrophages)
Sterility:	0.2 µm filtered

### Target Details

Target:	Calprotectin (S100A8/A9)
Alternative Name:	Calprotectin (S100A8/A9 Products)
Background:	The monoclonal antibody 27E10 recognizes an epitope specific for the S100A8/A9
	heterocomplex that is not exposed on the individual subunits S100A8 (MRP8, calgranulin-A) or
	S100A9 (MRP14, calgranulin- B). The calcium-binding migration inhibitory factor-related
	proteins, MRP-8 (S100A8) and MRP-14 (S100A9) belong to the S100 protein family. The

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 1/3 | Product datasheet for ABIN2192016 | 01/24/2024 | Copyright antibodies-online. All rights reserved. expression of these proteins is largely confined to the cytosol of neutrophils and monocytes. The complex formation of these proteins is a calcium-dependent process. The S100A8/A9 heterocomplex, also called MRP-8/MRP-14 complex or calprotectin, comprises 60 % of the cytoplasmic protein fraction of circulating polymorphonuclear granulocytes and is also found in monocytes, macrophages and ileal tissue eosinophils. Peripheral blood monocytes carry the antigen extra- and intracellularly, neutrophils only intracellularly. The S100A8/A9 complex has antibacterial, antifungal, immunomodulating and antiproliferative effects. Besides this it is a potent chemotactic factor for neutrophils. Plasma concentrations are elevated in diseases associated with increased neutrophil activity, like inflammatory bowel disease. Granulocytes terminate their existence after transmigration through the intestinal wall. Therefore calprotectin is also detectable in feces. Elevated levels of calprotectin have been observed in body fluids such as plasma, saliva, gingival crevicular fluid, stools, and synovial fluid during infection and inflammatory conditions. The monoclonal antibody 27E10 can be used for early detection of inflammatory macrophages, for the characterization of tumorous tissues and the monitoring of peripheral blood cell cultures. The antibody 27E10 does not react with lymphocytes or platelets. Aliases S100A8/A9, MRP-8/MRP-14, calprotectin, calgranulin-A/calgranulin-B, L1-protein Immunogen Human blood monocytes

Pathways:

#### S100 Proteins

#### Application Details

Application Notes:	For immunohistology, flow cytometry and Western blotting, dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50. Positive Human granulocytes control Negative Platelets, lymphocytes, HL-60 cells control
Restrictions:	For Research Use only
Handling	
Concentration:	0.1 mg/mL
Concentration: Buffer:	0.1 mg/mL PBS, containing 0.1 % bovine serum albumin and 0.02 % sodium azide.
Concentration: Buffer: Preservative:	0.1 mg/mL PBS, containing 0.1 % bovine serum albumin and 0.02 % sodium azide. Sodium azide
Concentration: Buffer: Preservative: Precaution of Use:	0.1 mg/mL PBS, containing 0.1 % bovine serum albumin and 0.02 % sodium azide. Sodium azide This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Order at www.antibodies-online.com | www.antikoerper-online.de | www.anticorps-enligne.fr | www.antibodies-online.cn International: +49 (0)241 95 163 153 | USA & Canada: +1 877 302 8632 | support@antibodies-online.com Page 2/3 | Product datasheet for ABIN2192016 | 01/24/2024 | Copyright antibodies-online. All rights reserved.

Handling	
Storage Comment:	Product should be stored at 4 °C. Under recommended storage conditions, product is stable for
Expiry Date:	12 months
Publications	
Product cited in:	Champaiboon, Sappington, Guenther, Ross, Herzberg: "Calprotectin S100A9 calcium-binding
	loops I and II are essential for keratinocyte resistance to bacterial invasion." in: The Journal of
	biological chemistry, Vol. 284, Issue 11, pp. 7078-90, (2009) (PubMed).
	Kuhn, Sonntag, Sunderkötter, Lehmann, Vestweber, Ruzicka: "Upregulation of epidermal surface
	molecule expression in primary and ultraviolet-induced lesions of lupus erythematosus
	tumidus." in: The British journal of dermatology, Vol. 146, Issue 5, pp. 801-9, (2002) (PubMed).
	Hessian, Fisher: "The heterodimeric complex of MRP-8 (S100A8) and MRP-14 (S100A9).
	Antibody recognition, epitope definition and the implications for structure." in: European journal
	of biochemistry / FEBS, Vol. 268, Issue 2, pp. 353-63, (2001) (PubMed).
	Zwadlo, Schlegel, Sorg: "A monoclonal antibody to a subset of human monocytes found only in
	the peripheral blood and inflammatory tissues." in: Journal of immunology (Baltimore, Md. :
	<b>1950)</b> , Vol. 137, Issue 2, pp. 512-8, (1986) (PubMed).