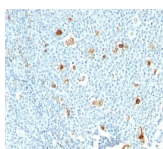


# Calprotectin (MRP14)(S100A9) Monoclonal Mouse Antibody (CPT/1028)



## Product Description

Recognizes the L1 or Calprotectin molecule, an intra-cytoplasmic antigen comprising of a 12 kDa alpha chain and a 14 kDa beta chain. 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. Calprotectin 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. This MAb reacts with neutrophils, monocytes, macrophages, and squamous mucosal epithelia and is important for identifying macrophages in tissue sections.

This antibody is available purified with BSA/azide at 200 ug/mL, or BSA/azide-free at 1 mg/mL. **Catalog number key for antibody number 1028, Anti-Calprotectin (CPT/1028)**

## Product attributes

Antibody number	#1028
Antibody reactivity (target)	Calprotectin
Antibody type	Primary
Host species	Mouse
Clonality	Monoclonal
Clone	CPT/1028
Isotype	IgM, kappa
Molecular weight	14 kDa
Synonyms	S100-A9; MRP14; calgranulin-B; calprotectin L1H subunit; leukocyte L1 complex heavy chain; migration inhibitory factor-related protein 14; S100 calcium-binding protein A9 (calgranulin B)
Human gene symbol	S100A9
Entrez gene ID	6280
SwissProt	P06702
Unigene	112405
Immunogen	Recombinant human Calprotectin protein
Verified antibody applications	IHC (FFPE) (verified)
Antibody target cellular localization	Cytoplasmic, Nucleus
Species reactivity	Human
Antibody application notes	Immunohistology formalin-fixed. Not suitable for frozen tissues. 0.5-1 ug/mL. Staining of formalin-fixed tissues requires boiling tissue sections in 10 mM citrate buffer, pH 6.0, for 10-20 min followed by cooling at RT for 20 minutes. Immunofluorescence 0.5-1 ug/mL. Flow Cytometry 0.5-1 ug/million cells/0.1 mL. Optimal dilution for a specific application should be determined by user
Positive control	Tonsil, lymph node, or spleen
Shipping condition	Room temperature
Storage Conditions	Store at 2 to 8 °C. Note: store BSA-free antibodies at -10 to -35 °C
Shelf life	Guaranteed for at least 24 months from date of receipt when stored as recommended
Regulatory status	For research use only (RUO)
Antibody/conjugate formulation	Conjugates: 0.1 mg/mL in PBS/0.1% BSA/0.05% azide, HRP conjugates: 0.1 mg/mL in PBS/0.05% BSA, Purified: 0.2 mg/mL in PBS/0.05% BSA/0.05% azide, Purified, BSA-free: 1 mg/mL in PBS without azide
Cell/tissue expression	Monocytes/macrophages
Antibody research areas	Immunology, Inflammation
Product origin	Product may contain either bovine serum albumin (BSA) from bovine serum ( <i>Bos taurus</i> ), or recombinant BSA produced in Chinese hamster ovary cells. Inquire for the specific lot.

Antibody # prefix	Conjugation	Ex/Em (nm)	Laser line	Detection channel	Dye Features
BNC04	CF@405S	404/431	405	DAPI (microscopy), AF405	<a href="#">CF@405S Features</a>
BNC88	CF@488A	490/515	488	GFP, FITC	<a href="#">CF@488A Features</a>
BNC68	CF@568	562/583	532, 561	RFP, TRITC	<a href="#">CF@568 Features</a>
BNC94	CF@594	593/614	561	Texas Red®	<a href="#">CF@594 Features</a>
BNC40	CF@640R	642/662	633-640	Cy@5	<a href="#">CF@640R Features</a>
BNC47	CF@647	650/665	633-640	Cy@5	<a href="#">CF@647 Features</a>
BNC74	CF@740	742/767	633-685	775/50	<a href="#">CF@740 Features</a>
BNCB	Biotin	N/A	N/A	N/A	
BNUB	Purified	N/A	N/A	N/A	
BNUM	Purified, BSA-free	N/A	N/A	N/A	

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Product link: <https://biotium.com/product/monoclonal-anti-calprotectin-cpt1028/>