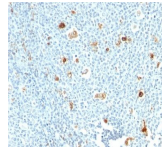


Calprotectin (MRP14)(S100A9) Monoclonal Mouse Antibody (CPT/1028)



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.

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