

# Calprotectin Monoclonal Antibody (MAC387)

Product Details	
Size	100 µg
Species Reactivity	Bovine, Dog, Deer, Horse, Cat, Guinea pig, Goat, Human, Non-human primate, Pig, Rabbit, Rat
Published Species	Dog, Pig, Rat, Bovine, Mouse, Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	MAC387
Conjugate	Unconjugated
Immunogen	Human monocytes.
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	PBS
Contains	0.09% sodium azide
Storage Conditions	4°C or -20°C if preferred
RRID	AB_2184262

Applications	Tested Dilution	Publications
Flow Cytometry (Flow)	1:50-1:100	3 Publications
Immunocytochemistry (ICC)	1:250	-
Immunofluorescence (IF)	1:250	-
Immunohistochemistry (Frozen) (IHC (F))	1:100-1:200	-
Immunohistochemistry (Paraffin) (IHC (P))	1:100-1:200	3 Publications
Western Blot (WB)	1:1000	-
Immunohistochemistry (IHC)	-	13 Publications

## Product Specific Information

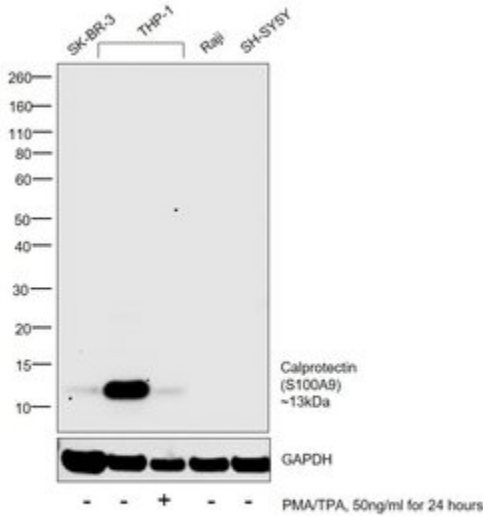
This clone recognizes the L1 or Calprotectin molecule, an intracytoplasmic antigen comprised of a 12 kDa alpha chain and a 14 kDa beta chain. Although originally described as binding to epitopes common to both the alpha and beta chains (Flavell et al. 1987) subsequent studies indicate that the antibody detects an epitope exclusively expressed on the beta chain (Goebeler et al. 1994) demonstrated by immunofluorescent and western blotting on both naturally expressing and transfected targets. In addition Mouse anti Human macrophages, clone MAC387 detects the beta chain in complex with the alpha. The antigen recognized by Mouse anti Human macrophages, clone MAC387 is expressed by granulocytes, monocytes and by tissue macrophages. Variable results have been reported for staining brain macrophages and microglia. The epitope recognized appears to be well conserved and the antibody is routinely used for the detection of myeloid cells in a wide range of species.

This product requires protein digestion pre-treatment of paraffin sections using trypsin or pronase prior to IHC staining. A suggested positive control is human spleen. For flow cytometry, use 10  $\mu$ L of the suggested working dilution to label  $1 \times 10^6$  cells in 100  $\mu$ L.

## Advanced Verification Data

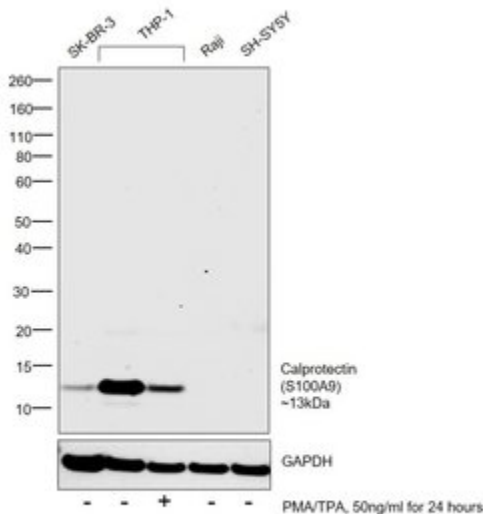
### Calprotectin Antibody (MA1-81381)

Altered expression of target protein upon cell treatment demonstrates antibody specificity. Western blot analysis using Anti-Calprotectin (S100A9) Monoclonal Antibody (Product # MA1-80155) shows decreased expression upon treatment of THP-1 with PMA/TPA [10.1073/pnas.0709958105]. Cell treatment validation info.



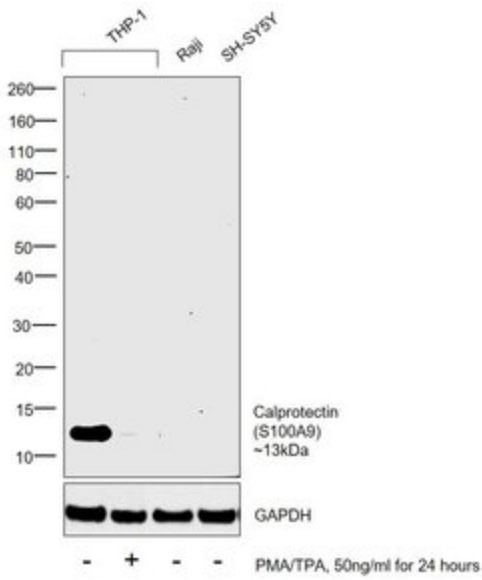
### Calprotectin Antibody (MA1-81381)

Altered expression of target protein upon cell treatment demonstrates antibody specificity. Western blot analysis using Anti-Calprotectin (S100A9) Monoclonal Antibody (Product # MA1-80446) shows decreased expression upon treatment of THP-1 with PMA/TPA [10.1073/pnas.0709958105]. Cell treatment validation info.



### Calprotectin Antibody (MA1-81381)

Altered expression of target protein upon cell treatment demonstrates antibody specificity. Western blot analysis using Anti-Calprotectin (S100A9) Monoclonal Antibody (Product # MA1-81381) shows decreased expression upon treatment of THP-1 with PMA/TPA [10.1073/pnas.0709958105]. Cell treatment validation info.



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## 19 References

### Immunohistochemistry (13)

#### Physiological genomics

##### Characterization of a preclinical model of chronic ischemic wound.

"MA1-81381 was used in immunohistochemistry to develop and evaluate a preclinical porcine model of chronic ischemic wound"

Authors: Roy S,Biswas S,Khanna S,Gordillo G,Bergdall V,Green J,Marsh CB,Gould LJ,Sen CK

**Species**  
Pig

**Dilution**  
1:200

**Year**  
2009

#### Transplantation

##### A Skin Rejection Grading System for Vascularized Composite Allotransplantation in a Preclinical Large Animal Model.

"MA1-80446 was used in Immunohistochemistry to provide a standardized system for more accurate comparison of rejection in preclinical swine VCA models."

Authors: Etra JW,Grzelak MJ,Fidder SAJ,Kolegraaf K,Bonawitz S,Shores J,Oh B,Cooney DS,Beck SE,Brandacher G

**Species**  
Pig

**Dilution**  
Not Cited

**Year**  
2019

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### Immunohistochemistry (Paraffin) (3)

#### PloS one

##### Identification of the critical therapeutic entity in secreted Hsp90 that promotes wound healing in newly re-standardized healthy and diabetic pig models.

"MA1-80446 was used in immunohistochemistry - paraffin section to characterize the therapeutic component of secreted Hsp90alpha that promotes wound healing in diabetic and healthy pig models that were re-standardized"

Authors: O'Brien K,Bhatia A,Tsen F,Chen M,Wong AK,Woodley DT,Li W

**Species**  
Not Applicable

**Dilution**  
1:100

**Year**  
2015

#### AJNR. American journal of neuroradiology

##### Differential Interstrain Susceptibility to Vertebrobasilar Dolichoectasia in a Mouse Model.

"MA181381 was used in immunohistochemistry - paraffin section to assess the differential susceptibility to elastase-induced vertebrobasilar dolichoectasia induction"

Authors: Zhu YQ,Xing H,Dai D,Kallmes DF,Kadirvel R

**Species**  
Mouse

**Dilution**  
1:200

**Year**  
2017

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### Flow (3)

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