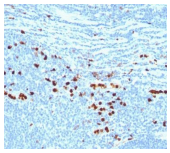
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# Calgranulin B / MRP-8/-14 / MAC 387 / S100A8/A9 / Macrophage Ag (MAC387)



## Product Description

Calprotectin is a heteroduplex of Protein S100-A8/A9 (also called MRP-8/14, or Calgranulin A/B). This antibody recognizes the 14 kDa B component (Protein S100-A9) of the complex. Protein S100-A9 is a member of the S100 family of proteins containing 2 EF-hand calcium-binding motifs. Altered expression of this protein is associated with the disease cystic fibrosis. This antibody reacts with neutrophils, monocytes, macrophages, and squamous mucosal epithelia and has been shown as an important marker for identifying macrophages in tissue sections.

Primary antibodies are available purified, or with a selection of fluorescent CF® dyes and other labels. CF® dyes offer exceptional brightness and photostability. See the CF® Dye Brochure for more information. Note: Conjugates of blue fluorescent dyes like CF®405S and CF®405M are not recommended for detecting low abundance targets, because blue dyes have lower fluorescence and can give higher non-specific background than other dye colors.

**Stock status:** Because Biotium offers a large number of antibody and conjugation options, primary antibody conjugates may be made to order. Typical lead times are up to one week for CF® dye and biotin conjugates, and up to 2-3 weeks for fluorescent protein and enzyme conjugates. Please email order@biotium.com to inquire about stock status and lead times before placing your order.

**Catalog number key for antibody number 0035, Anti-Calgranulin-B (MAC387)**

## Product attributes

| | |
|---|---|
| **Antibody number** | #0035 |
| **Antibody reactivity (target)** | Calprotectin, S100-A9 |
| **Antibody type** | Primary |
| **Host species** | Mouse |
| **Clonality** | Monoclonal |
| **Clone** | MAC387 |
| **Isotype** | IgG1, kappa |
| **Molecular weight of antigen** | 12-14 kDa (doublet) |
| **Synonyms** | Calprotectin; Protein S100-A9; Myeloid-related protein 14; MRP-14; Calgranulin B; CAGB; Calprotectin L1H Subunit |
| **Entrez gene ID** | 6279 (S100A8/Calgranulin A/MRP-8) & 6280 (S100A9/Calgranulin B/MRP-14) |
| **SwissProt** | P05109 (S100A8/Calgranulin A/MRP-8) & P06702 (S100A9/Calgranulin B/MRP-14) |
| **Unigene** | 416073 (S100A8/Calgranulin A/MRP-8) & 112405 (S100A9/Calgranulin B/MRP-14) |
| **Immunogen** | Affinity purified monocyte membrane preparation |
| **Antibody target cellular localization** | Cytoplasmic, Cytoskeleton |
| **Cell/tissue expression** | Granulocytes, Monocytes/macrophages |
| **Species reactivity** | Baboon, Cat, Cow, Dog, Goat, Guinea pig, Horse, Human, Monkey, Mouse, Pig, Rabbit, Rat |
| **Verified antibody applications** | IHC (FFPE) (verified) |
| **Expected antibody applications** | Flow (intracellular) (published for clone), IP (published for clone), WB (published for clone) |
| **Antibody application notes** | Higher concentration may be required for direct detection using primary antibody conjugates than for indirect detection with secondary antibody, Immunofluorescence: 0.5-1 ug/mL, Immunohistology formalin-fixed 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, 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, Protect fluorescent conjugates from light, 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 research areas** | Immunology, Inflammation |
| **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 |
| **Product origin** | Product may contain either bovine serum albumin (BSA) from bovine serum (Bos taurus), 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 | CF®405S Features |
| BNC88 | CF®488A | 490/515 | 488 | GFP, FITC | CF®488A Features |
| BNC68 | CF®568 | 562/583 | 532, 561 | RFP, TRITC | CF®568 Features |
| BNC94 | CF®594 | 593/614 | 561 | Texas Red® | CF®594 Features |
| BNC40 | CF®640R | 642/662 | 633-640 | Cy®5 | CF®640R Features |
| BNC47 | CF®647 | 650/665 | 633-640 | Cy®5 | CF®647 Features |
| BNC74 | CF®740 | 742/767 | 633-685 | 775/50 | CF®740 Features |
| 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 | |

Alexa Fluor, Pacific Blue, Pacific Orange, and Texas Red are trademarks or registered trademarks of Thermo Fisher Scientific; Cy is a registered trademark of Cytiva; IRDye, LI-COR, and Odyssey are registered trademarks of LI-COR Bioscience.

## References

Note: References for this clone sold by other suppliers may be listed for expected applications.

1. J Histochem Cytochem (1987) 35(11): 1217-1226 (IP; WB; IHC, FFPE)
2. J Histochem Cytochem (1990) 38(11): 1669-1675. (IHC, FFPE)
3. J Leukocyte Biol (1994) 55: 259. (WB; IHC)
4. World J Gastroenterol (2017)23(8): 1477-1488. (Flow, intracellular)