

#### Instructions For Use

### RA0288-C.5-IFU-RUO

Rev. Date: Dec. 3, 2014

**Revision: 1** 

Page 1 of 2

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 - Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

## Macrophage Marker (Calgranulin A/B); Clone CAG/426

(Concentrate)

Availability/Contents: <u>Item #</u> <u>Volume</u>
RA0288-C.5 <u>Volume</u>
0.5 ml

**Description:** 

Species: Mouse

Immunogen: Recombinant human Calgranulin protein

Clone: CAG/426 Isotype: IgG1, kappa

Entrez Gene ID: 6279 (S100A8/Calgranulin A/MRP-8) & 6280 (S100A9/Calgranulin B/MRP-14) (Human)

Hu Chromosome Loc.: 1q21

Synonyms: 60B8AG; Calgranulin A (CAGA); Calgranulin B (CAGB); Calprotectin L1L subunit; Chemotactic

cytokine CP-10; Cystic fibrosis antigen (CFAG); Leukocyte L1 complex light chain; L1Ag; Macrophage L1 protein Calprotectin; Migration inhibitory factor related protein 8; Myeloid-related protein 8 (MRP-8 or P8); Myeloid-related protein 14 (MRP-14 or P14); Neutrophil cytosolic 7kDa protein; NIF; p8; Migration inhibitory factor related protein 14; S100 calcium binding protein A8 (S100A8); S100 calcium binding protein A9 (S100A9); S100A8/S100A9

complex; MA387; Pro-inflammatory S100 cytokine; Urinary stone protein band A

Mol. Weight of Antigen: 12-14kDa (single subunit)

Format: 200µg/ml of Ab purified from Bioreactor Concentrate by Protein A/G. Prepared in 1mM PBS

with 0.05% BSA & 0.05% azide.

Specificity: Recognizes a 12-14kDa subunit of Calgranulin A/B (also known as S100A8/A9 or MRP-8/14);

this protein is expressed by granulocytes, monocytes, and tissue macrophages. This antibody reacts with neutrophils, monocytes, macrophages, and squamous mucosal epithelia, and has

been shown to be an important marker for identifying macrophages in tissue sections.

Background: The Calgranulin A/B protein is a member of the S100 family of proteins containing 2 EF-hand

calcium-binding motifs. S100 proteins are localized in the cytoplasm and/or nucleus of a wide range of cells, and are involved in the regulation of a number of cellular processes such as cell cycle progression and differentiation. Altered expression of this protein is associated with the

disease cystic fibrosis.

Species Reactivity: Human, Baboon, Monkey, Cow, Pig. Goat, Horse, Cat. Dog, Rabbit, Guinea pig, Rat, and

Mouse. Others not known.

Positive Control: Tonsil, lymph node, or spleen.

Cellular Localization: Cytoplasmic

Titer/ Working Dilution: Immunohistochemistry (Frozen and Formalin-fixed): 0.5-1 µg/ml

Flow Cytometry: 0.5-1 µg/million cells

 $\begin{array}{ll} \mbox{Immunofluorescence:} & 0.5\mbox{-}1 \ \mbox{$\mu$g/ml$} \\ \mbox{Western Blotting:} & 0.5\mbox{-}1 \ \mbox{$\mu$g/ml$} \end{array}$ 

Immunoprecipitation: 0.5-1 μg/500μg protein lysate

Microbiological State: This product is not sterile.

Storage: 2° C 8° C

ScyTek Laboratories, Inc.

205 South 600 West Logan, UT 84321 U.S.A. (6

EmergoEurope (31)(0) 70 345-8570

Molsnstraat 15

2513 BH Hague, The Netherlands



# Instructions For Use RA0288-C.5-IFU-RUO

Rev. Date: Dec. 3, 2014

**Revision: 1** 

Page 2 of 2

P.O. Box 3286 - Logan, Utah 84323, U.S.A. - Tel. (800) 729-8350 - Tel. (435) 755-9848 - Fax (435) 755-0015 - www.scytek.com

**Uses/Limitations:** Not to be taken internally.

For Research Use Only.

This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded

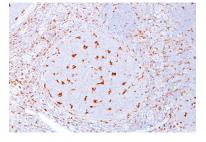
tissue sections, to be viewed by light

microscopy.

Do not use if reagent becomes cloudy. Do not use past expiration date.

Non-Sterile.

Ordering Information and Current Pricing at www.scytek.com



Formalin-fixed, paraffin-embedded human tonsil stained with Macrophage Marker; Clone CAG/426.

#### Procedure:

- 1. **Tissue Section Pretreatment (Required):** Staining of formalin fixed, paraffin embedded tissue sections is significantly enhanced by digestion with Trypsin (Two Component Solution). (ScyTek catalog# TSS).
- Primary Antibody Incubation Time: We suggest an incubation period of 30 minutes at room temperature.
   However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.
- 3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (ScyTek catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (ScyTek catalog# ACV500, see IFU for instructions).

#### Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).

Do not pipette by mouth.

Avoid contact of reagents and specimens with skin and mucous membranes.

Avoid microbial contamination of reagents or increased nonspecific staining may occur.

This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200,

OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

#### References:

 Hermani, A., et al. 2005. Calcium-binding proteins S100A8 and S100A9 as novel diagnostic markers in human prostate cancer. Clin. Cancer Res. 11: 5146-5152.

#### Warranty:

No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. ScyTek Laboratories, Inc. is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.

Storage: 2° C

ScyTek Laboratories, Inc. 205 South 600 West Logan, UT 84321 U.S.A. CE

EC REP EmergoEurope (31)(0) 70 345-8570 Molsnstraat 15 2513 BH Hague, The Netherlands