# Peninsula Laboratories, LLC

**A Member of the Bachem Group**

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## Monoclonal Antibody To Human MRP8/14

### S100A8/A9, Calprotectin, L1 Protein - Acute Inflammation Marker

Monoclonal antibody 27E10 is unique in that it recognizes an epitope on the MRP8/14 heterocomplex that is not exposed on the individual subunits MRP8 or MRP14. It is ideally suited for the detection of early inflammatory macrophages and thus for the classification of acute stage inflammation in tissue sections and in smears, the characterization of tumorous tissues and the *in vitro* monitoring of peripheral blood cell cultures. The corresponding MRP8/14 ELISA (product S-1011) has shown great advantages in the early assessment of certain acute inflammatory conditions.

| | |
|---|---|
| **Product Number:** | T-1023 |
| **Clone:** | 27E10 |
| **Host species, isotype:** | Mouse IgG1 |
| **Quantity:** | 100µg |
| **Format:** | Affinity purified, lyophilized |
| | Reconstitute by adding 0.5ml distilled water. This stock solution contains 0.2mg/ml IgG, phosphate buffered saline pH 7.2 (PBS), 10mg/ml bovine serum albumin (BSA) as a stabilizer and 0.01% thimerosal as a preservative. |
| **Stability:** | Original vial: 1 year at 4° - 8°C |
| | Stock solution or aliquots thereof: 1 year at -20°C. Avoid repeated thawing and freezing. |
| **Applications:** | Tested for immunohistochemistry (IHC) and ELISA; has been described to work in FACS and dot blots. |
| | **Approximate working dilution for IHC:**<br>Frozen sections: 1µg/ml (1:200)<br>Paraffin sections: 2µg/ml (1:100); Proteinase K pretreatment for antigen retrieval is recommended. |
| | Optimal dilutions should be determined by the end user. |
| | Suggested positive control: Human tonsil. |
| **Immunogen:** | Cultured human monocytes. |
| **Antigen, epitope:** | The antigen is MRP8/14 (calprotectin), the epitope involves parts of both subunits MRP8 and MRP14. |

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**Antigen distribution:**

**Isolated cells:** Monocytes carry the antigen both on the surface and intracellularly, granulocytes exhibit it only intracellularly. Up to 80% of monocytes in early cultures (24-48h) are positive. No reaction has been seen with lymphocytes or platelets.

**Tissue sections:** The antigen is found in macrophages in the red pulp of the spleen and liver. It is strongly expressed in macrophages from acute inflamed tissues (peridontitis, contact eczema, urticaria, erythrodermia) where some endothelial and epidermal cells may also express this antigen. It is normally absent on resident mononuclear phagocytes in healthy tissues (skin, gut, thymus).

**Specificity:**

**Human:** subpopulation of macrophages, monocytes and granulocytes; peripheral blood monocytes carry the antigen extra- and intracellularly, neutrophils only intracellularly.

**Other:** subpopulation of macrophages of rhesus monkey.

## Selected references


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For in vitro research only. Caution: this product contains thimerosal, a poisonous and hazardous substance.