

Polyclonal Anti-human EN-RAGE-Phycoerythrin

Catalog Number: FAB1052P

Lot Number: ACDB01

100 Tests

Reagents Provided

Phycoerythrin (PE)-conjugated goat polyclonal anti-human

EN-RAGE: Supplied as 25 µg of antibody in 1 mL saline containing up to 0.5% BSA and 0.1% sodium azide.

Isotype: goat IgG

Reagents Not Provided

- Flow Cytometry Staining Buffer (Catalog # FC001) or other BSA-supplemented saline buffer.

Storage

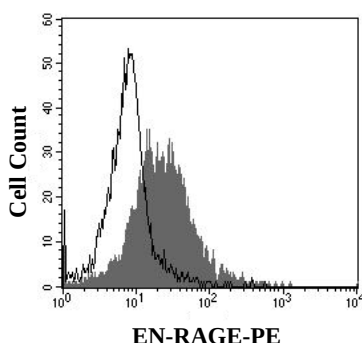
Reagents are stable for **twelve months** from the date of receipt when stored in the dark at 2° - 8° C.

Intended Use

Designed to quantitatively determine the percentage of cells bearing EN-RAGE within a population and qualitatively determine the density of EN-RAGE on cell surfaces by flow cytometry.

Product Description

This antibody was produced in goats immunized with purified, *E. coli*-derived, recombinant human EN-RAGE (rhEN-RAGE, aa 1 - 92; Accession # P80511) extracellular domain. Human EN-RAGE specific IgG was purified by human EN-RAGE affinity chromatography. The purified antibody was then conjugated to PE fluorochrome. Cell surface expression of EN-RAGE is determined by flow cytometry using 488 nm wavelength excitation and monitoring emitted fluorescence with a detector optimized to collect peak emissions at 565 - 605 nm.



Human peripheral blood monocytes were stained with PE-conjugated anti-human EN-RAGE (Catalog # FAB1052P, filled histogram) or PE-conjugated control antibody (Catalog # IC108P, open histogram).

Background Information

EN-RAGE, also known as S100A12 and Calgranulin C, is a 10 kDa secreted molecule that belongs to the S100 family of calcium binding proteins. EN-RAGE contains two EF hand domains and forms dimers and hexamers in solution. EN-RAGE is overexpressed at sites of inflammation and interacts with RAGE on endothelial cells, lymphocytes, and monocytes to promote inflammatory responses. Human EN-RAGE shares 66% and 70% amino acid sequence identity with bovine and porcine EN-RAGE, respectively; mouse and rat orthologs have not been identified.

Flow Cytometry Validation

This antibody has been tested for flow cytometry using human peripheral blood monocytes.

- Cells may be Fc-blocked with 1 µg of mouse IgG/10⁵ cells for 15 minutes at room temperature. Do not wash excess blocking IgG from this reaction.
- After blocking, 10 µL of conjugated antibody was added to up to 1 x 10⁶ cells and incubated for 30 minutes at room temperature.
- Unbound antibody was removed by washing the cells twice in Flow Cytometry Staining Buffer (Catalog # FC001). Note that whole blood requires a RBC lysis step at this point using Flow Cytometry Mouse Lyse Buffer (Catalog # FC003).
- The cells were resuspended in Flow Cytometry Staining Buffer for final flow cytometric analysis. As a control for this analysis, cells in a separate tube should be treated with PE-labeled goat IgG antibody. This procedure may need to be modified, depending upon the cell type and final utilization. Individual users may need to titrate to determine the optimal reagent amount for their specific use.

Warning: Contains sodium azide as a preservative - sodium azide may react with lead and copper plumbing to form explosive metal azides. Flush with large volumes of water during disposal.