

## DESCRIPTION

|                           |                                                                                            |
|---------------------------|--------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                      |
| <b>Specificity</b>        | Detects recombinant mouse F4/80 protein in Direct ELISA.                                   |
| <b>Source</b>             | Monoclonal Rat IgG <sub>2A</sub> Clone # 1123826                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                 |
| <b>Immunogen</b>          | Chinese Hamster Ovary cell line, CHO-derived mouse EMR-1 Met1-Ser590<br>Accession # Q61549 |
| <b>Formulation</b>        | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose.                         |

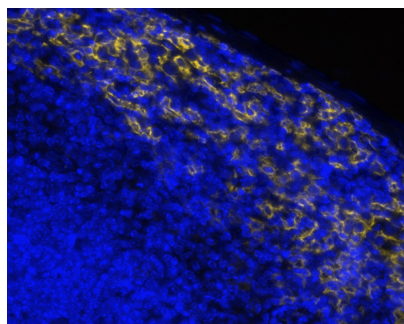
## APPLICATIONS

**Please Note:** Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

|                             | <b>Recommended Concentration</b> | <b>Sample</b>                                                                                           |
|-----------------------------|----------------------------------|---------------------------------------------------------------------------------------------------------|
| <b>Western Blot</b>         | 2 µg/mL                          | Mouse spleen and J774A.1 mouse reticulum cell sarcoma macrophage cell line                              |
| <b>Immunohistochemistry</b> | 0.25-25 µg/mL                    | Perfusion fixed paraffin-embedded sections of mouse spleen and sections of mouse liver                  |
| <b>COMET</b>                | 3 µg/mL                          | Immersion fixed paraffin-embedded sections of mouse spleen, mouse testis, mouse liver and mouse kidney. |

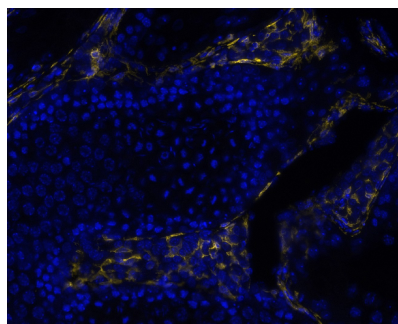
## DATA

### Multiplex Immunofluorescence



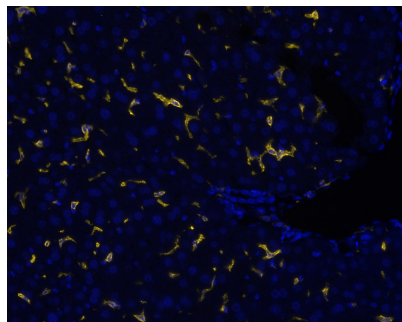
**Detection of EMR1 in Mouse Spleen via seqIF™ staining on COMET™** EMR-1 was detected in immersion fixed paraffin-embedded sections of mouse spleen using Rat Anti-Mouse EMR-1 Monoclonal Antibody (Catalog # MAB11811) at 3µg/mL at 37 ° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; Epredia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Rat IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647RT) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the membrane. Protocol available in COMET™ Panel Builder.

### Multiplex Immunofluorescence



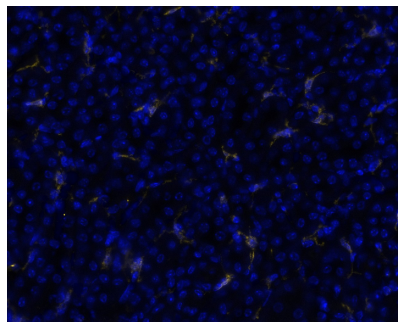
**Detection of EMR1 in Mouse Testis via seqIF™ staining on COMET™** EMR-1 was detected in immersion fixed paraffin-embedded sections of mouse testis using Rat Anti-Mouse EMR-1 Monoclonal Antibody (Catalog # MAB11811) at 3µg/mL at 37 ° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; Epredia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Rat IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # DR647RT) and counterstained with DAPI (blue; Lunaphore Catalog # DR100). Specific staining was localized to the membrane. Protocol available in COMET™ Panel Builder.

#### Multiplex Immunofluorescence



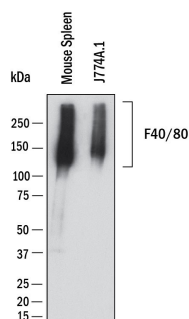
**Detection of EMR1 in Mouse Liver via seqIF™ staining on COMET™** EMR-1 was detected in immersion fixed paraffin-embedded sections of mouse liver using Rat Anti-Mouse EMR-1 Monoclonal Antibody (Catalog # MAB11811) at 3µg/mL at 37 ° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; EpreDia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Rat IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # [DR647RT](#)) and counterstained with DAPI (blue; Lunaphore Catalog # [DR100](#)). Specific staining was localized to the membrane. Protocol available in [COMET™ Panel Builder](#).

#### Multiplex Immunofluorescence



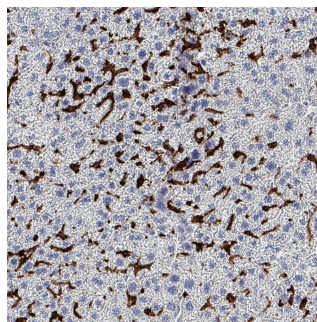
**Detection of EMR1 in Mouse Kidney via seqIF™ staining on COMET™** EMR-1 was detected in immersion fixed paraffin-embedded sections of mouse kidney using Rat Anti-Mouse EMR-1 Monoclonal Antibody (Catalog # MAB11811) at 3µg/mL at 37 ° Celsius for 4 minutes. Before incubation with the primary antibody, tissue underwent an all-in-one dewaxing and antigen retrieval preprocessing using PreTreatment Module (PT Module) and Dewax and HIER Buffer H (pH 9; EpreDia Catalog # TA-999-DHBH). Tissue was stained using the Alexa Fluor™ 647 Goat anti-Rat IgG Secondary Antibody at 1:200 at 37 ° Celsius for 2 minutes. (Yellow; Lunaphore Catalog # [DR647RT](#)) and counterstained with DAPI (blue; Lunaphore Catalog # [DR100](#)). Specific staining was localized to the membrane. Protocol available in [COMET™ Panel Builder](#).

#### Western Blot



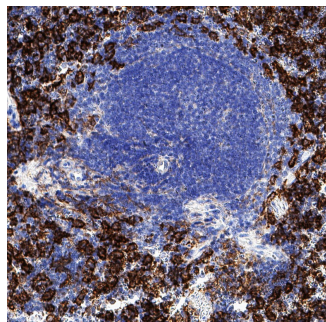
**Detection of Mouse F4/80 by Western Blot.** Western Blot shows lysates of mouse spleen and J774A.1 mouse reticulum cell sarcoma macrophage cell line. PVDF membrane was probed with 2 µg/ml of Rat Anti-Mouse F4/80 Monoclonal Antibody (Catalog # MAB11811) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # [HAF005](#)). A specific band was detected for F4/80 at approximately 130-300 kDa (as indicated). This experiment was conducted under reducing conditions and using [Western Blot Buffer Group 1](#).

#### Immunohistochemistry



**Perfusion fixed paraffin-embedded sections of mouse liver** F4/80 was detected in perfusion fixed paraffin-embedded sections of mouse liver using Rat Anti-Mouse F4/80 Monoclonal Antibody (Catalog # MAB11811) at 5 µg/ml overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # [VCTS021](#)). Tissue was stained using the HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # [HAF005](#)) and counterstained with hematoxylin (blue). Specific staining was localized to the membrane. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

#### Immunohistochemistry



**Perfusion fixed paraffin-embedded sections of mouse spleen** F4/80 was detected in perfusion fixed paraffin-embedded sections of mouse spleen using Rat Anti-Mouse F4/80 Monoclonal Antibody (Catalog # MAB11811) at 5 µg/ml overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using VisUCyte Antigen Retrieval Reagent-Basic (Catalog # VCTS021). Tissue was stained using the HRP-conjugated Anti-Rat IgG Secondary Antibody and counterstained with hematoxylin (blue). Specific staining was localized to the membrane. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

#### PREPARATION AND STORAGE

|                                |                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reconstitution</b>          | Reconstitute lyophilized material at 0.2 mg/ml in sterile PBS. For liquid material, refer to CoA for concentration.                                                                                                                                                                                                                                             |
| <b>Shipping</b>                | Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.                                                                                                                                                                          |
| <b>Stability &amp; Storage</b> | <p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul> |

#### BACKGROUND

F4/80, also known as EMR1, is a 160 kDa extensively glycosylated protein in the EGF-TM7 family of adhesion molecules. It is primarily expressed on macrophages and dendritic cells in mouse but is restricted to eosinophils in human. F4/80 plays a role in the development of peripheral tolerance.