Anti-F4/80 Antibody

IRS052

Product Type:	Recombinant Rabbit monoclonal IgG, primary antibodies
Species reactivity:	Mouse
Applications:	mIHC
Molecular Wt:	Predicted band size: 102 kDa

Description: EGF-like module-containing mucin-like hormone receptor-like 1 also known as F4/80 is a protein encoded by the ADGRE1 gene. EMR1 is a member of the adhesion GPCR family. Adhesion GPCRs are characterized by an extended extracellular region often possessing N-terminal protein modules that is linked to a TM7 region via a domain known as the GPCR-Autoproteolysis INducing (GAIN) domain. EMR1 expression in human is restricted to eosinophils and is a specific marker for these cells. The murine homolog of EMR1, F4/80, is a well-known and widely used marker of murine macrophage populations. The N-terminal fragment (NTF) of EMR1 contains 4-6 Epidermal Growth Factor-like (EGF-like) domains in human and 4-7 EGF-like domains in the mouse. Utilizing F4/80 knockout mice, Lin et al. showed that F4/80 is not necessary for the development of tissue macrophages but is required for the induction of efferent CD8+ regulatory T cells needed for peripheral tolerance.

Immunogen: Recombinant protein within mouse F4/80 aa 1-650 / 931.

Positive control: Mouse spleen tissue.

Subcellular location: Cell membrane.

Database links: SwissProt: Q61549 Mouse

Recommended Dilutions:

mIHC	1:100

Storage Buffer: PBS (pH7.4), 0.1% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Store at +4℃ after thawing. Aliquot store at -20℃ or -80℃. Avoid repeated freeze / thaw cycles.

Purity: Protein A affinity purified.

Images

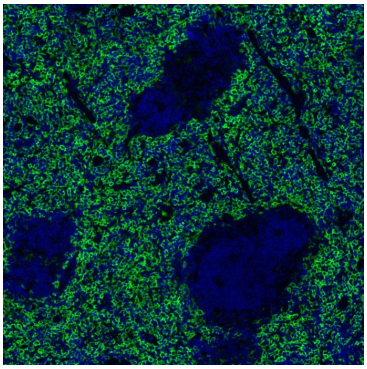

Fig1: mIHC analysis of mouse spleen tissue (Formalin/PFA-fixed paraffin-embedded sections) with Rabbit anti-F4/80 antibody (IRS052) at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95℃. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

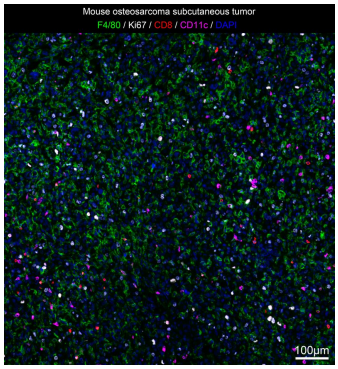

Fig2: mIHC analysis of mouse osteosarcoma subcutaneous tumor tissue (Formalin/PFA-fixed paraffin-embedded sections) with F4/80 (IRS052), Ki67 (IRS057), CD8 and CD11c antibody at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95℃. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

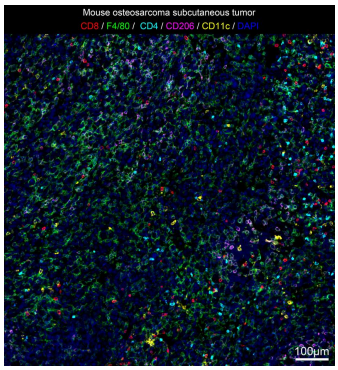

Fig3: mIHC analysis of mouse osteosarcoma subcutaneous tumor tissue (Formalin/PFA-fixed paraffin-embedded sections) with CD8, F4/80 (IRS052), CD4 (IRS051), CD206 (IRS049) and CD11c antibody at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95℃. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

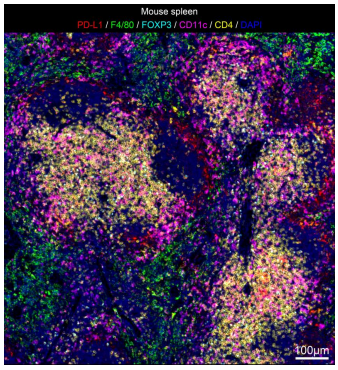

Fig4: mIHC analysis of mouse spleen tissue (Formalin/PFA-fixed paraffin-embedded sections) with PD-L1 (IRS059), F4/80 (IRS052), FOXP3 (IRS053), CD11c and CD4 (IRS051) antibody at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95℃. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

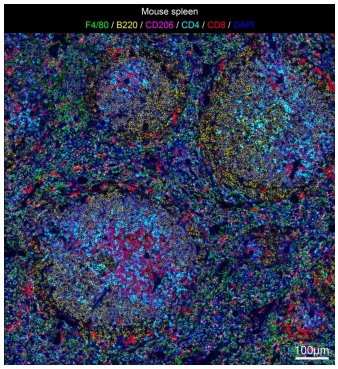

Fig5: mIHC analysis of mouse spleen tissue (Formalin/PFA-fixed paraffin-embedded sections) with F4/80 (IRS052), B220, CD206 (IRS049), CD4 (IRS051) and CD8 antibody at 1/100 dilution. The immunostaining was performed with the IRISKit® HyperView mTSA Kit (MH900206). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0) for 30 mins at 95℃. DAPI (blue) was used as a nuclear counter stain. Image acquisition was performed with Olympus VS200 Slide Scanner.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

Background References

1. Deng R et al. Periosteal CD68+ F4/80+ Macrophages Are Mechanosensitive for Cortical Bone Formation by Secretion and Activation of TGF-β1. Adv Sci (Weinh). 2022 Jan
2. Shin AE et al. F4/80+Ly6Chigh Macrophages Lead to Cell Plasticity and Cancer Initiation in Colitis. Gastroenterology. 2023 Apr