

Data Sheet

Reconstitution/ Storage	100 µl antiserum, lyophilized. For reconstitution add 100 µl H ₂ O, then aliquot and store at -20°C until use.
Applications	WB: not recommended IP: not tested yet ICC: not tested yet IHC: 1 : 500 IHC-P/FFPE: 1 : 500
Immunogen	Synthetic peptide corresponding to AA 28 to 42 from mouse F4/80 (UniProt Id: Q61549)
Reactivity	Reacts with: mouse (Q61549). Other species not tested yet.
Specificity	Specific for F4/80.

**TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS**

The murine macrophage cell surface glycoprotein **F4/80** is a member of the epidermal growth factor-seven transmembrane (EGF-TM7) family. It is involved in the generation of antigen-specific efferent regulatory T cells that suppress antigen-specific immunity but not required for the development and distribution of tissue macrophages.

Although F4/80 is widely used as a marker of murine macrophage populations it is not equivalently expressed across tissue-specific macrophage lineages: e.g. red pulp macrophages of the spleen and Kupffer cells of the liver are F4/80-positive, white pulp and marginal zone macrophages of the spleen are F4/80-negative and alveolar macrophages are F4/80dim.

F4/80 expression is not restricted to macrophages, but also found in murine Epidermal Langerhans Cells; dendritic cells of the skin. The human ortholog of F4/80, EGF-like module containing mucin-like hormone receptor (EMR)1, is absent on mononuclear phagocytic cells including monocytes, macrophages, and myeloid dendritic cells and seems to be highly specific for eosinophils in humans.

Selected General References

Tissue macrophages: heterogeneity and functions.

Gordon S, Plüddemann A

BMC biology (2017) 15(1): 53.

Macrophage heterogeneity in tissues: phenotypic diversity and functions.

Gordon S, Plüddemann A, Martinez Estrada F

Immunological reviews (2014) 262(1): 36-55.

The dendritic cell lineage: ontogeny and function of dendritic cells and their subsets in the steady state and the inflamed setting.

Merad M, Sathe P, Helft J, Miller J, Mortha A

Annual review of immunology (2013) 31: 563-604.

The macrophage F4/80 receptor is required for the induction of antigen-specific efferent regulatory T cells in peripheral tolerance.

Lin HH, Faunce DE, Stacey M, Terajewicz A, Nakamura T, Zhang-Hoover J, Kerley M, Mucenski ML, Gordon S, Stein-Streilein J
The Journal of experimental medicine (2005) 201(10): 1615-25.

The EGF-TM7 family: unusual structures at the leukocyte surface.

McKnight AJ, Gordon S

Journal of leukocyte biology (1998) 63(3): 271-80.