

# Human Reactive M1 vs M2 Macrophage IHC Antibody Sampler Kit



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1 Kit (6 x 20 microliters)

# For Research Use Only. Not for Use in Diagnostic Procedures.

Product Includes	Product #	Quantity	Mol. Wt	Isotype/Source
CD68 (D4B9C) XP <sup>®</sup> Rabbit mAb	76437	20 μΙ		Rabbit IgG
CD163 (D6U1J) Rabbit mAb	93498	20 μΙ	160, 170 kDa	Rabbit IgG
CD206/MRC1 (E2L9N) Rabbit mAb	91992	20 μΙ	190-250 kDa	Rabbit IgG
CD11c (D3V1E) XP <sup>®</sup> Rabbit mAb	45581	20 μΙ	145 kDa	Rabbit IgG
CD86 (E2G8P) Rabbit mAb	91882	20 μΙ	60-85 kDa	Rabbit IgG
HLA-DRA (E9R2Q) XP <sup>®</sup> Rabbit mAb	97971	20 μΙ	30-40 kDa	Rabbit IgG
Phospho-Stat1 (Tyr701) (58D6) Rabbit mAb	9167	20 μΙ	84, 91 kDa	Rabbit IgG
Anti-rabbit IgG, HRP-linked Antibody	7074	100 µl		Goat

Please visit cellsignal.com for individual component applications, species cross-reactivity, dilutions, protocols, and additional product information.

### Description

The Human Reactive M1 vs M2 Macrophage IHC Antibody Sampler Kit provides an economical means of characterizing the extent of M1 and M2 macrophages in formalin-fixed, paraffin-embedded tissue samples.

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100  $\mu$ g/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at  $-20^{\circ}$ C. Do not aliquot the antibodies.

# **Background**

Macrophages are myeloid cells of the innate immune system that are found in all human tissues in the body and exhibit anatomical and functional diversity. These heterogenous cells are derived from monocyte precursors in the blood that infiltrate into the tissues and differentiate in the presence of cytokines and growth factors. A spectrum of different macrophage phenotypes, or polarizations, have been described based on their secretory profiles, gene expression, and functions. Macrophages have great plasticity and can switch from one phenotype to another under different conditions. At the opposite extremes of this spectrum are so called M1, or classically activated phenotype, and M2 or alternatively activated phenotype. M1 macrophages are generally inflammatory and anti-tumor, while M2 macrophages, commonly referred to as tumor-associated macrophages (TAMs), are generally anti-inflammatory and pro-tumor. Relative contents of M1 and M2 macrophages in the tumor microenvironment may have prognostic values. Modulating macrophage polarization is actively pursued as a therapeutic intervention for many different diseases (1-6). In humans, CD68 is considered a general marker for macrophages. CD11c, CD86, HLA-DRA, phospho-STAT1 (Tyr701), and others have been used as markers for M1 macrophages, while CD163, CD206, and

## **Background References**

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others have been used as markers for M2 macrophages (7-10).

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