Species Reactivity
Human/Mouse/Rat/Chicken

Specificity
Detects human, mouse, rat and chicken Oligodendrocyte Marker O1.

Source
Monoclonal Mouse IgM Clone # O1

Purification
IgM-specific Affinity-purified from hybridoma culture supernatant

Immunogen
Bovine brain corpus callosum white matter

Formulation
Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

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.

Recommended Concentration
Sample

Flow Cytometry
0.25 μg/10^6 cells
See Below

Immunocytochemistry
1-25 μg/mL
See Below

CyTOF-ready
Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.

PREPARATION AND STORAGE

Reconstitution
Reconstitute at 0.5 mg/mL in sterile PBS.

Shipping
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.

*Small pack size (-SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

Stability & Storage
Use a manual defrost freezer and avoid repeated freeze-thaw cycles.

- 12 months from date of receipt, -20 to -70 °C as supplied.
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Oligodendrocytes are myelinating cells in the central nervous system (CNS) that form the myelin sheath of axons to support rapid nerve conduction. Oligodendrocyte Marker O1 recognizes a glycolipid antigen that is expressed on the surface of late oligodendrocyte progenitors. It has been commonly used in conjunction with Oligodendrocyte Marker O4 antibody to define immature oligodendrocyte (1-6). Progenitors that are O4 antigen-positive and O1 antigen-negative have been shown to differentiate into O1 antigen-positive oligodendrocytes in vitro (7).

References: