

Human/Mouse/Rat/Chicken Oligodendrocyte Marker O1 Alexa Fluor® 594-conjugated Antibody

Monoclonal Mouse IgM Clone # O1

Catalog Number: FAB1327T

100 µg

DESCRIPTION

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
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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	0.25-1 µg/10 ⁶ cells	Rat differentiated cortical stem cells

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

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:

- Schachner, M. *et al.* (1981) *Dev. Biol.* **83**:328.
- Bansal, R. *et al.* (1989) *J. Neurosci. Res.* **24**:548.
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- Reynolds, R. and R. Hardy (1997) *J. Neurosci. Res.* **47**:455.
- Ono, K. *et al.* (1997) *J. Neurosci. Res.* **48**:212.
- Cai, Z. *et al.* (2001) *Brain Res.* **898**:126.

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