

# Human/Mouse/Rat/Chicken Oligodendrocyte Marker O1 Alexa Fluor® 700-conjugated Antibody

Monoclonal Mouse IgM Clone # O1

Catalog Number: FAB1327N

## DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse/Rat/Chicken
<b>Specificity</b>	Detects human, mouse, rat and chicken Oligodendrocyte Marker O1.
<b>Source</b>	Monoclonal Mouse IgM Clone # O1
<b>Purification</b>	IgM-specific Affinity-purified from hybridoma culture supernatant
<b>Immunogen</b>	Bovine brain corpus callosum white matter
<b>Conjugate</b>	Alexa Fluor 700 Excitation Wavelength: 675-700 nm Emission Wavelength: 723 nm
<b>Formulation</b>	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
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	Rat differentiated cortical stem cells

## PREPARATION AND STORAGE

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

## 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.
- Sontheimer, H. *et al.* (1989) Neuron **2**:1135.
- Hardy, R.J. and V.L. Friedrich Jr. (1996) Development **122**:2059.
- 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.

## PRODUCT SPECIFIC NOTICES

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