

DESCRIPTION

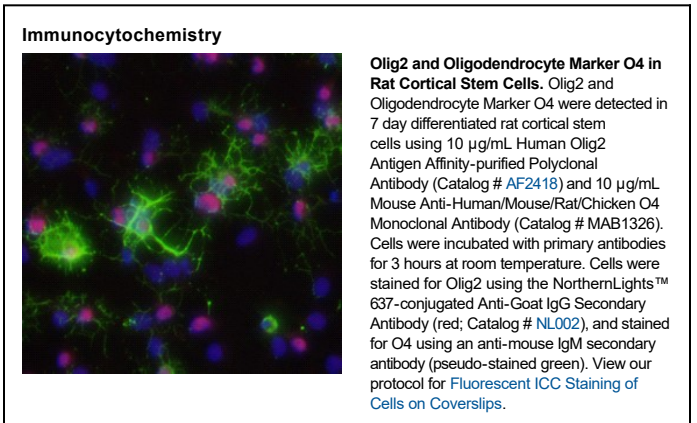
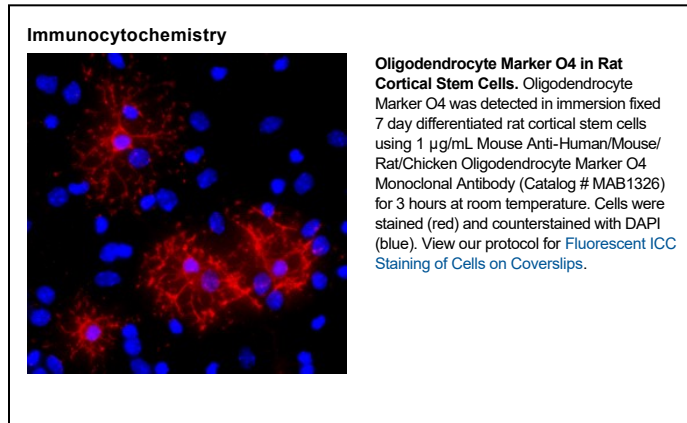
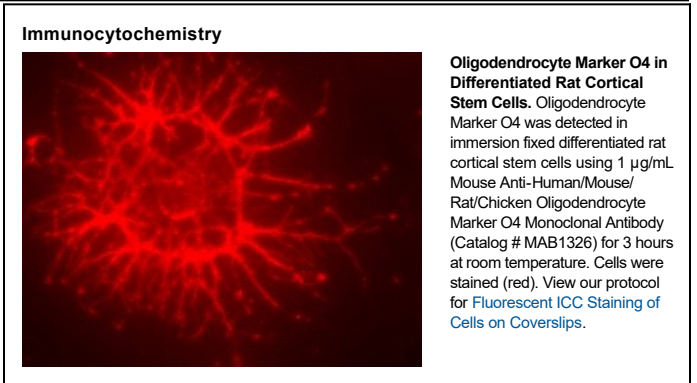
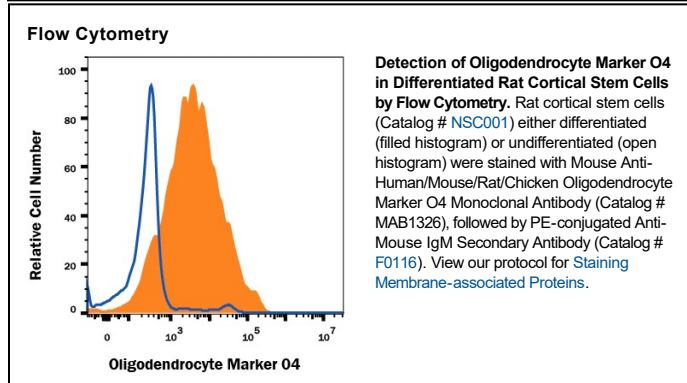
Species Reactivity	Human/Mouse/Rat/Chicken
Specificity	Detects human, mouse, rat, and chicken Oligodendrocyte Marker O4.
Source	Monoclonal Mouse IgM Clone # O4
Purification	IgM-specific Affinity-purified from hybridoma culture supernatant
Immunogen	Bovine brain corpus callosum white matter
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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	1-10 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.	

DATA



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 shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> • 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) and form the myelin sheath of axons to support rapid nerve conduction. Oligodendrocyte Marker O4 is an antigen on the surface of oligodendrocyte progenitors (1, 2). It has been commonly used as the earliest recognized marker specific for the oligodendroglial lineage (3-8).

References:

1. Schachner, M. *et al.* (1981) *Dev. Biol.* **83**:328.
2. Bansal, R. *et al.* (1989) *J. Neurosci. Res.* **24**:548.
3. Bansal, R. and Pfeiffer, S.E. (1989) *Proc. Natl. Acad. Sci. USA* **86**:6181.
4. Gard, A. *et al.* (1995) *Dev. Biol.* **167**:596.
5. Reynolds, R. and Hardy, R. (1997) *J. Neurosci. Res.* **47**:455.
6. Ono, K. *et al.* (1997) *J. Neurosci. Res.* **48**:212.
7. Pang, Y. *et al.* (2000) *J. Neurosci. Res.* **62**:510.
8. Cai, Z. *et al.* (2001) *Brain Res.* **898**:126.