

**DESCRIPTION**

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Semaphorin 4C in direct ELISAs. Detects HEK293 human embryonic kidney cell line transfected with mouse Semaphorin 4C by Flow Cytometry. Does not detect untransfected or irrelevant transfected HEK293 cells.
<b>Source</b>	Monoclonal Rat IgG <sub>1</sub> Clone # 663203
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Semaphorin 4C Ala21-Phe664 Accession # Q64151
<b>Conjugate</b>	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Flow Cytometry</b>	0.25-1 µg/10 <sup>6</sup> cells	HEK293 human embryonic kidney cell line transfected with mouse Semaphorin 4C and eGFP

**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> ● 12 months from date of receipt, 2 to 8 °C as supplied.

**BACKGROUND**

Sema4C (Semaphorin 4C; also Sema I and M-SemaF) is a 100-105 kDa, class IV member of the semaphorin family of proteins. It is expressed by precursors to neurons and myocytes, and may regulate their differentiation into mature forms. Mature mouse Sema4C is a type I transmembrane glycoprotein that is 814 amino acids (aa) in length. It contains a 644 aa extracellular region (aa 21-664) that is characterized by the presence of one Sema domain (aa 30-497), a PSI region (aa 499-552), and an Ig-like C2-type domain (aa 557-645). The cytoplasmic region interacts with PZD-domain containing proteins. Over aa 21-664, mouse Sema4C shares 85% and 95% aa identity with human and rat Sema4C, respectively.

**PRODUCT SPECIFIC NOTICES**

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.