

#### DESCRIPTION

<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Pref-1 in direct ELISAs.
<b>Source</b>	Monoclonal Rabbit IgG Clone # 1168B
<b>Purification</b>	Protein A or G purified from cell culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Pref-1/DLK1/FA1 Ala24-Gln305 Accession # Q09163
<b>Conjugate</b>	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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	3T3-L1 mouse embryonic fibroblast adipose-like cell line

#### 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

Pref-1 (Preadipocyte factor 1), also known as Protein delta homolog 1, DLK1, FA1 and Fetal antigen 1, is a 45-60 kDa transmembrane glycoprotein that is highly expressed in fetal liver, placenta, adult adrenal gland, brain, testis and ovary. Expression of Pref-1 is elevated in liver after birth but starts to decline around postnatal day 16. Mature mouse Pref-1 is a 362 amino acid (aa) type I transmembrane N- and O-linked glycoprotein. It contains a 282 aa extracellular region (aa 24-305), a 24 aa transmembrane segment (aa 306-329), and a 56 aa cytoplasmic domain (aa 330-385). It contains 6 EGF-like domains and is involved in embryonic skeletal system development. Pref-1 inhibits preadipocyte proliferation by regulating their entry into G1/S-phase and represses preadipocyte differentiation. It is a master regulator of preadipocyte homeostasis and adipose tissue expansion. Pref-1 manipulation may, therefore, be utilized in obesity treatments. Mouse Pref-1 shares 85% and 94% aa identity with human and rat Pref-1, 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.