

DESCRIPTION

| | |
|---------------------------|---|
| Species Reactivity | Human/Mouse |
| Specificity | Detects mouse and human PRDM16 in direct ELISAs and Western blots. |
| Source | Polyclonal Sheep IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -derived recombinant mouse PRDM16 Lys537-Glu688 Accession # A2A935.1 |
| Conjugate | Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 nm |
| Formulation | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.

| | |
|-----------------------------|--|
| Western Blot | Optimal dilution of this antibody should be experimentally determined. |
| Immunohistochemistry | Optimal dilution of this antibody should be experimentally determined. |

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. 12 months from date of receipt, 2 to 8 °C as supplied |

BACKGROUND

PRDM16 (PR [PRDI-BF1 and RIZ] domain containing protein 16; also MEL-1) is a 170 kDa member of the PR Domain family of proteins. It is a transcriptional regulator expressed in the embryo, and is reported to participate in the maintenance of both neuronal and hematopoietic progenitor stem cells populations, and to preferentially promote the development of brown fat from adipomyocyte precursors. The generation of brown fat is likely due to suppression of muscle-specific factors. Mouse PRDM16 is 1275 amino acids (aa) in length. It contains one SET domain (aa 85-208) followed by ten C2H2 type Zn finger motifs (aa 230-1030). There are multiple potential isoform variants that likely vary from 150-170 kDa in size. One isoform shows a deletion of aa 1232-1250, a second isoform shows a three aa substitution for aa 1174-1275, and a third isoform possesses an alternative start site at Met21, coupled to a deletion of aa 1196-1133. Over aa 537-688, mouse PRDM16 shares 81% and 95% aa identity with human and rat PRDM16, 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.