

#### DESCRIPTION

<b>Species Reactivity</b>	Human/Mouse
<b>Specificity</b>	Detects mouse and human PRDM16 in direct ELISAs and Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant mouse PRDM16 Lys537-Glu688 Accession # A2A935.1
<b>Conjugate</b>	Alexa Fluor 532 Excitation Wavelength: 534 nm Emission Wavelength: 553 nm
<b>Formulation</b>	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.

<b>Western Blot</b>	Optimal dilution of this antibody should be experimentally determined.
<b>Immunohistochemistry</b>	Optimal dilution of this antibody should be experimentally determined.

#### 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>	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

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