

#### DESCRIPTION

|                                                                                                                                                                                                         |                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| <b>Species Reactivity</b>                                                                                                                                                                               | Human/Mouse                                                                           |
| <b>Specificity</b>                                                                                                                                                                                      | Detects human and mouse PEA-15 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 human PEA-15<br>Ala2-Ala130<br>Accession # Q15121 |
| <b>Conjugate</b>                                                                                                                                                                                        | Alexa Fluor 532<br>Excitation Wavelength: 534 nm<br>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

PEA-15 (Phosphoprotein Enriched in Astrocytes of 15 kDa) is a 15 kDa cytoplasmic protein that regulates cell proliferation and apoptosis. It is expressed in multiple cell types such as astrocytes; skeletal muscle and adipocytes. Human PEA-15 is 130 amino acids (aa) in length. It contains a death effector domain (aa 3-81), plus two regulatory Ser phosphorylation sites. In a quiescent cell, it is either non-phosphorylated or constitutively phosphorylated at Ser116. Non-phosphorylated PEA-15 binds ERK, inhibiting cell proliferation. Phosphorylation at Ser116 promotes PEA-15 binding to FADD, blocking apoptosis. And activation-induced phosphorylation at Ser104 blocks PEA-15 binding to ERK, promoting cell proliferation. There is one potential alternate start site 21 aa upstream of the standard start site, and a second isoform that shows an Asn substitution for aa 36-58. Full-length human and mouse PEA-15 show 99% aa identity.

#### 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.