

Rabbit Anti-PEA15 antibody

SL3524R

Product Name:	PEA15
Chinese Name:	星形胶质细胞PEA15抗体
Alias:	Astrocytic phosphoprotein PEA 15; Astrocytic phosphoprotein PEA15; HMAT 1; HMAT1; Homolog of mouse MAT 1 oncogene; Homolog of mouse MAT1 oncogene; HUMMAT 1H; HUMMAT1H; MAT 1; MAT 1H; MAT1; MAT1H; PEA 15; PEA-15; PEA15 protein; PED; Phosphoprotein enriched in astrocytes 15; Phosphoprotein enriched in diabetes; PEA15 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Rabbit,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	15kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human PEA15:51-130/130
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	PED/PEA 15 (Phosphoprotein Enriched in Diabetes/Phosphoprotein Enriched in Astrocytes 15 kDa) is a widely expressed 15 kDa protein comprised of an N terminal

region containing a canonical Death Effector Domain (DED) sequence and a nuclear export signal, and a C terminal region containing two serine phosphorylation sites. PED/PEA 15 has been implicated in the regulation of multiple cellular processes including apoptosis, integrin activation, and insulin sensitive glucose transport in insulin responsive cells. Phosphorylation of both serine 104 (a Protein Kinase C site) and serine 116 (a substrate of CaMKII and Akt) is required for PED/PEA 15 function.

Function:

Blocks Ras-mediated inhibition of integrin activationand modulates the ERK MAP kinase cascade. Inhibits RPS6KA3activities by retaining it in the cytoplasm (By similarity).Inhibits both TNFRSF6- and TNFRSF1A-mediated CASP8 activity andapoptosis. Regulates glucose transport by controlling both the content of SLC2A1 glucose transporters on the plasma membrane and the insulin-dependent trafficking of SLC2A4 from the cell interior to the surface.

Subunit:

Binds RPS6KA3, MAPK3 and MAPK1. Transient interaction with PLD1 and PLD2 (By similarity). Interacts with CASP8 and FADD.

Subcellular Location:

Cytoplasm. Note=Associated withmicrotubules.

Tissue Specificity:

Ubiquitously expressed. Most abundant intissues such as heart, brain, muscle and adipose tissue whichutilize glucose as an energy source. Lower expression inglucose-producing tissues. Higher levels of expression are found intissues from individuals with type 2 diabetes than in controls.

Post-translational modifications:

Phosphorylated by protein kinase C and calcium-calmodulin-dependent protein kinase. These phosphorylation events are modulated by neurotransmitters or hormones.

Similarity:

Contains 1 DED (death effector) domain.

SWISS:

Q15121

Gene ID:

8682

Database links:

Entrez Gene: 8682Human

Entrez Gene: 18611 Mouse

Omim: 603434Human

SwissProt: Q15121Human

SwissProt: Q62048Mouse

Unigene: 517216Human

Unigene: 544 Mouse

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.