

DESCRIPTION

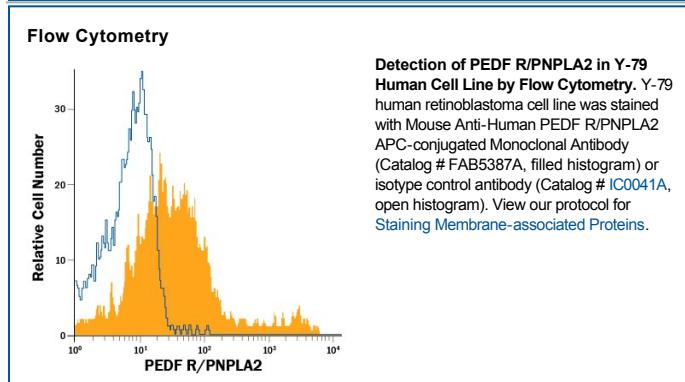
Species Reactivity	Human
Specificity	Detects human PEDF R/PNPLA2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant mouse PEDF R is observed.
Source	Monoclonal Mouse IgG _{2B} Clone # 494702
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human PEDF R/PNPLA2 Val162-Thr332 Accession # Q96AD5
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
Formulation	Supplied 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

	Recommended Concentration	Sample
Flow Cytometry	10 µL/10 ⁶ cells	See Below

DATA



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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

PEDF R (Pigment Epithelium-derived Factor Receptor), also known as PNPLA2, ATGL, TTS2.2, iPLA2ζ (Calcium-independent Phospholipase A2 zeta) and Desnutrin, is a 82-86 kDa type II transmembrane protein that is a member of the patatin-like phospholipase domain-containing protein family (gene name PNPLA2). PEDF is highly expressed in adipose tissue (both white and brown fat cells), where it catalyzes formation of diacylglycerol from triglyceride, the transfer of an acyl (CoA-fatty acid) derivative to acyl-glycerol, and releases arachidonic acid from intracellular lipid deposits. It has also been found on retinal pigment epithelium, endothelial cells, hepatocytes, cerebellar granule cells, macrophages, mast cells, ovarian granulosa cells, retinal ganglion neurons and skeletal muscle cells. PEDF R is directly activated by PEDF, and indirectly by β3-AR which promotes CGI-58 association. Human PEDF R shares 85% amino acid (aa) sequence identity with mouse and rat PEDF R within aa 162-332, the region used as an immunogen.