

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse PEAR1 in direct ELISAs and Western blots. In direct ELISAs, approximately 15% cross-reactivity with recombinant human PEAR1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse PEAR1 Leu19-Leu754 Accession # Q8VIK5
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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.

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	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

PEAR1 (Platelet Endothelial Aggregation Receptor 1; Also Jedi/Jagged and Delta protein and MEGF12) is a 140-160 kDa member of the MEGF/Multiple Epidermal Growth Factor domain family of molecules. It has restricted expression, being found on megakaryocytes/platelets, vascular endothelial cells, early hematopoietic stem cells and dorsal root ganglia satellite glial cells. PEAR1 has an extracellular domain (ECD) similar to Jagged1, and soluble PEAR1 is known to be an inhibitor of notch signaling. Thus, it likely participates in blood cell differentiation. It also is reported to bind to apoptotic neurons, facilitating clearance during development. Mature mouse PEAR1 is a 1016 amino acid (aa) type I transmembrane protein. It possesses a 736 aa ECD (aa 19-754) plus a 259 aa cytoplasmic region (aa 776-1034). The ECD contains one EMI (Emilin) domain (aa 25-137), followed by 9 EGF-like repeats (aa 181-691). There are at least three utilized phosphorylation sites in the cytoplasmic tail. Three isoform variants exist. One shows a deletion of aa 375-404, a second contains an 11 aa substitution for aa 737-747, and a third utilizes an alternative start site at Met137. Over aa 19-754, mouse PEAR1 shares 94% and 85% aa sequence identity with rat and human PEAR1, respectively.

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