SANTA CRUZ BIOTECHNOLOGY, INC.

PEAR1 (G-14): sc-163219

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The Power to Question

BACKGROUND

PEAR1 (platelet endothelial aggregation receptor 1), also known as JEDI or MEGF12 (multiple epidermal growth factor-like domains protein 12), is a 1,037 amino acid single-pass membrane protein belonging to the MEGF family. Containing nine EGF-like domains and one EMI domain, PEAR1 functions as a platelet receptor that signals during platelet-platelet contact, independent of platelet activation and secondary to platelet aggregation. Encoded by a gene that maps to human chromosome 1q23.1, PEAR1 is expressed in heart, kidney, skeletal muscle, pancreas, ovary, breast, lung, brain cortex, hypothalamus, spinal cord, dorsal root ganglion, endothelial cells of umbilical cord artery and vein, megakaryocytes, osteoblasts, coronary muscle and erythroid cells, with weak expression in peripheral blood leukocytes and macrophages. Overexpression of PEAR1 reduces both early and late non-adherent myeloid progenitor cell numbers. PEAR1 may also be tyrosine phosphorylated by c-Src, subsequently associating with both Shc and Sck.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: PEAR1 (human) mapping to 1q23.1; Pear1 (mouse) mapping to 3 F1.

SOURCE

PEAR1 (G-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of PEAR1 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-163219 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

PEAR1 (G-14) is recommended for detection of PEAR1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

PEAR1 (G-14) is also recommended for detection of PEAR1 in additional species, including equine, bovine and porcine.

Suitable for use as control antibody for PEAR1 siRNA (h): sc-88802, PEAR1 siRNA (m): sc-152151, PEAR1 shRNA Plasmid (h): sc-88802-SH, PEAR1 shRNA Plasmid (m): sc-152151-SH, PEAR1 shRNA (h) Lentiviral Particles: sc-88802-V and PEAR1 shRNA (m) Lentiviral Particles: sc-152151-V.

Molecular Weight of PEAR1: 111 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.