

Rabbit anti-Human PLXDC2 Polyclonal Antibody | anti-PLXDC2 antibody

Anti-PLXDC2 Antibody Picoband

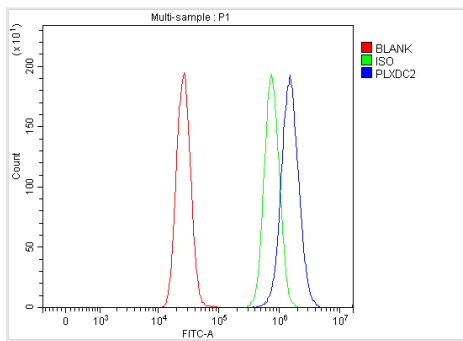
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA19912	Rabbit	Human	ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

PLXDC2; Polyclonal Antibody; Anti-PLXDC2 Antibody Picoband; protein phosphatase; Mg2+/Mn2+ dependent 1E; Protein phosphatase 1E; Ca (2+)/calmodulin-dependent protein kinase phosphatase N; CaMKP-N; CaMKP-nucleus; CaMKN; Partner of PIX 1; Partner of PIX-alpha; Partner of PIXA; PPM1E; CAMKN; KIAA1072; POPX1; anti-PLXDC2 antibody

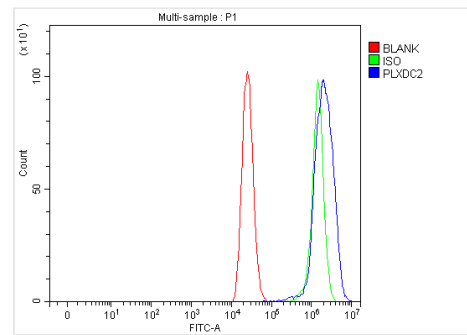
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Expressed in fetal and adult brain. Also detected in fetal liver and skeletal muscle, but not in their adult counterparts.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
Applicable Applications for anti-PLXDC2 antibody	ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Application Notes	WB: 0.25-0.5ug/ml, Human IHC(Paraffin-embedded Section): 2-5ug/ml, Human FC/FACS (Fixed): 1-3ug /1x10 ⁶ cells, Human ELISA: 0.1-0.5ug/ml
Immunogen	E coli-derived human PLXDC2 recombinant protein (Position: D23-K448).
Subcellular Localization	Nucleus, Cytoplasm
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.
Cross Reactivity	No cross-reactivity with other proteins.
Protein Function	Protein phosphatase that inactivates multifunctional CaM kinases such as CAMK4 and CAMK2. Dephosphorylates and inactivates PAK. May play a role in the inhibition of actin fiber stress breakdown and in morphological changes driven by TNK2/CDC42. Dephosphorylates PRKAA2.
Preparation and Storage	At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing.



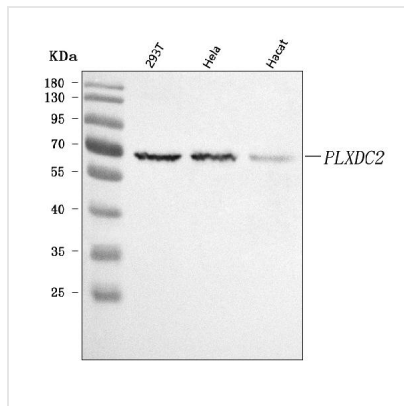
FCM (Flow Cytometry)

Figure 6. Flow Cytometry analysis of MCF-7 cells using anti-PLXDC2 antibody (AAA19912). Overlay histogram showing MCF-7 cells stained with AAA19912 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PLXDC2 Antibody (AAA19912, 1ug/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



FCM (Flow Cytometry)

Figure 5. Flow Cytometry analysis of Caco-2 cells using anti-PLXDC2 antibody (AAA19912). Overlay histogram showing Caco-2 cells stained with AAA19912 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-PLXDC2 Antibody (AAA19912, 1 μ g/1x10⁶ cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1 μ g/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IHC (Immunohistochemistry)

Figure 4. IHC analysis of PLXDC2 using anti-PLXDC2 antibody (AAA19912). PLXDC2 was detected in a paraffin-embedded section of human lymphoma tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PLXDC2 Antibody (AAA19912) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PLXDC2 Antibody (AAA19912) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/ml rabbit anti-PLXDC2 Antibody (AAA19912) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Lane 2: human Hela whole cell lysates, Lane 3: human Hacat whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-PLXDC2 antigen affinity purified polyclonal antibody (HAAA19912) at 0.5ug/mL overnight at 4 degree C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for PLXDC2 at approximately 60 kDa. The expected band size for PLXDC2 is at 60 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-PLXDC2 antibody	The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Product Categories/Family for anti-PLXDC2 antibody	Primary Antibodies; Growth Factors/Hormones; Signal Transduction
References	1. Carson-Walter, E. B., Watkins, D. N., Nanda, A., Vogelstein, B., Kinzler, K. W., St. Croix, B. Cell surface tumor endothelial markers are conserved in mice and humans. Cancer Res. 61: 6649-6655, 2001. 2. St. Croix, B., Rago, C., Velculescu, V., Traverso, G., Romans, K. E., Montgomery, E., Lal, A., Riggins, G. J., Lengauer, C., Vogelstein, B., Kinzler, K. W. Genes expressed in human tumor endothelium. Science 289: 1197-1202, 2000. 3. Stumpf, A. M. Personal Communication. Baltimore, Md. 01/11/2022.

NCBI AND UNIPROT INFORMATION

NCBI GI #	40255005
NCBI GeneID	84898
NCBI Accession #	NP_116201.7
NCBI GenBank Nucleotide #	NM_032812.7
UniProt Accession #	Q6UX71; Q96E59; Q96PD9; Q96SU9
Molecular Weight	59,583 Da
NCBI Official Full Name	plexin domain-containing protein 2
NCBI Official Synonym Full Names	plexin domain containing 2
NCBI Official Symbol	PLXDC2
NCBI Official Synonym Symbols	TEM7R
NCBI Protein Information	plexin domain-containing protein 2; 1200007L24Rik; tumor endothelial marker 7-related protein
UniProt Protein Name	Plexin domain-containing protein 2
UniProt Gene Name	PLXDC2
UniProt Synonym Gene Names	TEM7R
UniProt Entry Name	PXDC2_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/plxdc2-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/19912>