

Mouse APPL/APPL1 Monoclonal Antibody | anti-APPL1 antibody

Anti-APPL/APPL1 Antibody (monoclonal, 5G11)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125923	Mouse	Human, Mouse, Rat	Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

APPL/APPL1; Monoclonal Antibody; Anti-APPL/APPL1 Antibody (monoclonal; 5G11); DCC-interacting protein 13-alpha; Dip13-alpha; Adapter protein containing PH domain; PTB domain and leucine zipper motif 1; APPL1; APPL; DIP13A; KIAA1428 ; adaptor protein; phosphotyrosine interacting with PH domain and leucine zipper 1; anti-APPL1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human, Mouse, Rat
Clonality	Monoclonal
Isotype	Mouse IgG2a
Clone Number	5G11
Specificity	Mouse IgG monoclonal antibody for APPL/APPL1 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na2HPO4.
Applicable Applications for anti-APPL1 antibody	FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human APPL/APPL1 recombinant protein (Position: K91-R668).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of U-937 cells using anti- APPL/APPL1 antibody (AAA125923). Overlay histogram showing U-937 cells stained with AAA125923 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-APPL/APPL1 Antibody (AAA125923, 1μg/1x10⁶ cells) for 30 min at 20 degree C. DyLight®488 conjugated goat anti-mouse IgG (BA1126, 5-10μg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1μg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



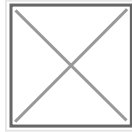
IHC (Immunohistochemistry)

Figure 4. IHC analysis of APPL/APPL1 using anti-APPL/APPL1 antibody (AAA125923). APPL/APPL1 was detected in paraffin-embedded section of human appendicitis tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-APPL/APPL1 Antibody (AAA125923) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



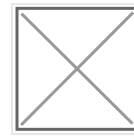
IHC (Immunohistochemisry)

Figure 3. IHC analysis of APPL/APPL1 using anti-APPL/APPL1 antibody (AAA125923).APPL/APPL1 was detected in paraffin-embedded section of human breast cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-APPL/APPL1 Antibody (AAA125923) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of APPL/APPL1 using anti-APPL/APPL1 antibody (AAA125923).Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions.Lane 1: human HL-60 whole cell lysatesLane 2: human THP-1 whole cell lysatesLane 3: human PC-3 whole cell lysatesLane 4: human Hela whole cell lysatesLane 5: rat brain tissue lysatesLane 6: mouse brain tissue lysates.After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1. 5 hour at RT. The membrane was incubated with mouse anti-APPL/APPL1 antigen affinity purified monoclonal antibody (Catalog # AAA125923) at 0. 5 μg/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-mouse IgG-HRP secondary antibody at a dilution of 1:10000 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 APPL/APPL1 at approximately 85KD. The expected band size for APPL/APPL1 is at 85KD.



IHC (Immunohiostchemistry)

Figure 2. IHC analysis of APPL/APPL1 using anti-APPL/APPL1 antibody (AAA125923).APPL/APPL1 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8. 0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2μg/ml mouse anti-APPL/APPL1 Antibody (AAA125923) overnight at 4 degree C. Biotinylated goat anti-mouse IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.

ADDITIONAL INFORMATION

Related Product Information for anti-APPL1 antibody	DCC-interacting protein 13-alpha(APPL1) is a protein that in humans is encoded by the APPL1 gene. The APPL1 gene is mapped to 3q21. 1-p13. 3. It is said to contain 709 amino acids and share 54% amino acid identity with APPL2. APPL is highly expressed in skeletal muscle, heart, ovary, and pancreas, tissues in which AKT2 mRNA is abundant. It has been regarded as an adaptor that may tether inactive AKT2 to the PI3K in the cytoplasm and thereby may expedite recruitment of AKT2 and PI3K to the cell membrane upon mitogenic stimulation.
References	1. Mitsuuchi Y, Johnson SW, Sonoda G, Tanno S, Golemis EA, Testa JR (Oct 1999). "Identification of a chromosome 3p14. 3-21. 1 gene, APPL, encoding an adaptor molecule that interacts with the oncoprotein-serine/threonine kinase AKT2". Oncogene 18 (35): 4891-8. doi:10. 1038/sj. onc. 1203080. PMID 10490823. 2. Nechamen CA, Thomas RM, Dias JA (Nov 2006). "APPL1, APPL2, Akt2 and FOXO1a interact with FSHR in a potential signaling complex". Mol Cell Endocrinol 260-262: 93-9. doi:10. 1016/j. Mce. 2006. 08. 014. PMC 1782224. PMID 17030088. 3. Entrez Gene: APPL1 adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 1".

NCBI AND UNIPROT INFORMATION

NCBI GI #	6912242
NCBI GeneID	26060
NCBI Accession #	NP_036228.1
NCBI GenBank Nucleotide #	NM_012096.2
UniProt Accession #	Q9UKG1; Q9P2B9
Molecular Weight	79,663 Da
NCBI Official Full Name	DCC-interacting protein 13-alpha

NCBI Official Synonym Full Names	adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 1
NCBI Official Symbol	APPL1
NCBI Official Synonym Symbols	APPL; DIP13alpha
NCBI Protein Information	DCC-interacting protein 13-alpha; dip13-alpha; AKT2 interactor; signaling adaptor protein DIP13alpha; adapter protein containing PH domain, PTB domain and leucine zipper motif 1; adaptor protein containing pH domain, PTB domain and leucine zipper motif 1
UniProt Protein Name	DCC-interacting protein 13-alpha
UniProt Gene Name	APPL1
UniProt Synonym Gene Names	APPL; DIP13A; KIAA1428; Dip13-alpha
UniProt Entry Name	DP13A_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://stage.aaabiotech.com/monoclonal/appl-appl1-antibody-clone-5g11-flow-cytometry-immunohistochemistry-western-blot-elisa/125923>