

Mouse anti-Human Ankyrin erythroid/ANK/ANK1 Monoclonal Antibody | anti-ANK1 antibody

Anti-Ankyrin erythroid/ANK/ANK1 Antibody Picoband (monoclonal, 5H2E8)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA126917	Mouse	Human	Flow Cytometry, Functional Assay, Western Blot

PRODUCT SYNONYMS

Ankyrin erythroid/ANK/ANK1; Monoclonal Antibody; Anti-Ankyrin erythroid/ANK/ANK1 Antibody Picoband (monoclonal; 5H2E8); anti-ANK1 antibody

PRODUCT SPECIFICATIONS

Host	Mouse
Reactivity	Human
Clonality	Monoclonal
Isotype	Mouse IgG2a
Clone Number	5H2E8
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml. (varies by lot)
Applicable Applications for anti-ANK1 antibody	FCM/FACS (Flow Cytometry), WB (Western Blot)
Reconstitution	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Immunogen	E Coli-derived human Ankyrin erythroid/ANK/ANK1 recombinant protein (Position: N1300-Q1844).
Preparation and Storage	Store 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/FACS (Flow Cytometry)

Figure 2. Flow Cytometry analysis of K562 cells using anti-Ankyrin erythroid/ANK/ANK1 antibody (AAA126917).Overlay histogram showing K562 cells stained with AAA126917 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with mouse anti-Ankyrin erythroid/ANK/ANK1 Antibody (AAA126917, 1 ug/1x10^6 cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-mouse IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was mouse IgG (1 ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



WB (Western Blot)

Figure 1. Western blot analysis of Ankyrin erythroid/ANK/ANK1 using anti-Ankyrin erythroid/ANK/ANK1 antibody (AAA126917).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 30 ug of sample under reducing conditions.Lane 1: human HEL whole cell lysates,Lane 2: human K562 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 mouse anti-Ankyrin erythroid/ANK/ANK1 antigen affinity purified monoclonal antibody (#AAA126917) at 0.5 ug/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 Ankyrin erythroid/ANK/ANK1 at approximately 206 kDa. The expected band size for Ankyrin erythroid/ANK/ANK1 is at 206 kDa.

ADDITIONAL INFORMATION

Related Product Information for anti-ANK1 antibody	Ankyrin 1, erythrocytic, also known as ANK1, is a protein that in humans is encoded by the ANK1 gene. Ankyrins are a family of proteins that link the integral membrane proteins to the underlying spectrin-actin cytoskeleton and play key roles in activities such as cell motility, activation, proliferation, contact and the maintenance of specialized membrane domains. Multiple isoforms of ankyrin with different affinities for various target proteins are expressed in a tissue-specific, developmentally regulated manner. Most ankyrins are typically composed of three structural domains: an amino-terminal domain containing multiple ankyrin repeats; a central region with a highly conserved spectrin binding domain; and a carboxy-terminal regulatory domain which is the least conserved and subject to variation. Ankyrin 1, the prototype of this family, was first discovered in the erythrocytes, but since has also been found in brain and muscles. Mutations in erythrocytic ankyrin 1 have been associated in approximately half of all patients with hereditary spherocytosis. Complex patterns of alternative splicing in the regulatory domain, giving rise to different isoforms of ankyrin 1 have been described. Truncated muscle-specific isoforms of ankyrin 1 resulting from usage of an alternate promoter have also been identified.
Product Categories/Family for anti-ANK1 antibody	Primary Antibodies, Mouse Monoclonal Antibodies

NCBI AND UNIPROT INFORMATION

NCBI GI #	70780357
NCBI GeneID	286
NCBI Accession #	NP_000028.3
NCBI GenBank Nucleotide #	NM_000037.3
UniProt Accession #	P16157; O43400; Q13768; Q53ER1; Q59FP2; Q8N604; Q99407; A0PJN8; A6NJ23; E5RFL7
Molecular Weight	17,854 Da
NCBI Official Full Name	ankyrin-1 isoform 3
NCBI Official Synonym Full Names	ankyrin 1, erythrocytic
NCBI Official Symbol	ANK1
NCBI Official Synonym Symbols	ANK; SPH1; SPH2
NCBI Protein Information	ankyrin-1; ANK-1; ankyrin-R; erythrocyte ankyrin
UniProt Protein Name	Ankyrin-1
UniProt Gene Name	ANK1

UniProt Synonym Gene Names	ANK; ANK-1
UniProt Entry Name	ANK1_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/ankyrin-erythroid-ank-ank1-antibody-clone-5h2e8-flow-cytometry-western-blot-elisa/126917>