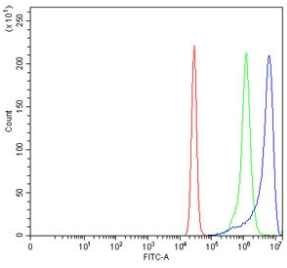
ANK1 Antibody / Erythrocyte Ankyrin / Ankyrin-1 [clone 5H2E8] (RQ7410)

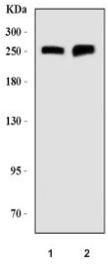
Catalog No.	Formulation	Size
RQ7410	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 business days
Species Reactivity	Human
Format	Antigen affinity purified
Host	Mouse
Clonality	Monoclonal (mouse origin)
Isotype	Mouse IgG2a
Clone Name	5H2E8
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	P16157
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This ANK1 antibody is available for research use only.



Flow cytometry testing of human K562 cells with ANK1 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= ANK1 antibody.



Western blot testing of human 1) HEL and 2) K562 cell lysate with ANK1 antibody. Predicted molecular weight ~206 kDa but can be observed at up to 246 kDa.

Description

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.

Application Notes

Optimal dilution of the ANK1 antibody should be determined by the researcher.

Immunogen

Recombinant human protein (amino acids N1300-Q1844) was used as the immunogen for the ANK1 antibody.

Storage

After reconstitution, the ANK1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.