

Product datasheet

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ARG11134 anti-ANK3 / Ankyrin G antibody

Package: 50 μl Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes ANK3 / Ankyrin G

Tested Reactivity Hu, Ms, Rat

Tested Application ICC/IF, IHC-Fr, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name ANK3 / Ankyrin G

Species Human

Immunogen The C-terminal 398 amino acids of Human ANK3 / Ankyrin G.

Conjugation Un-conjugated

Alternate Names Ankyrin-3; Ankyrin-G; MRT37; ANKYRIN-G; ANK-3

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:1000
	IHC-Fr	1:1000
	WB	1:500
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

Form Liquid

Purification Affinity purified.

Buffer PBS, 5 mM Sodium azide and 50% Glycerol.

Preservative 5 mM Sodium azide

Stabilizer 50% Glycerol

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol

ANK3

Gene Full Name

ankyrin 3, node of Ranvier (ankyrin G)

Background

Ankyrins are a family of proteins that are believed to 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 3 is an immunologically distinct gene product from ankyrins 1 and 2, and was originally found at the axonal initial segment and nodes of Ranvier of neurons in the central and peripheral nervous systems. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Feb 2011]

Function

In skeletal muscle, required for costamere localization of DMD and betaDAG1 (By similarity). Membrane-cytoskeleton linker. May participate in the maintenance/targeting of ion channels and cell adhesion molecules at the nodes of Ranvier and axonal initial segments. Regulates KCNA1 channel activity in function of dietary Mg(2+) levels, and thereby contributes to the regulation of renal Mg(2+) reabsorption (PubMed:23903368).

[Isoform 5]: May be part of a Golgi-specific membrane cytoskeleton in association with beta-spectrin. [UniProt]

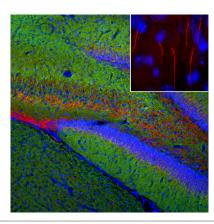
Calculated Mw

480 kDa

Cellular Localization

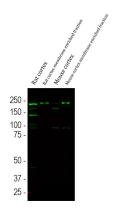
Cytoplasm, cytoskeleton. Cell projection, axon. Cell membrane, sarcolemma. Cell junction, synapse, postsynaptic cell membrane. Lysosome. Note=In skeletal muscle, localized at costameres and neuromuscular junctions. In macrophages, associated with lysosomes. Isoform 5: Cytoplasm, cytoskeleton. Golgi apparatus. [UniProt]

Images



ARG11134 anti-ANK3 / Ankyrin G antibody IHC-Fr image

Immunohistochemistry: Frozen section of Rat brain tissue stained with ARG11134 anti-ANK3 / Ankyrin G antibody (red) at 1:1000 dilution and co-stained with ARG10720 anti-MAP2cd antibody [2C4] (green) at 1:5000 dilution. DAPI (blue) for nuclear staining. (Sample preparation: Following transcardial perfusion of rat with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45 μM , and free-floating sections were stained with above antibodies.).



ARG11134 anti-ANK3 / Ankyrin G antibody WB image

Western blot: Rat cortex, Rat cortex membrane enriched fraction, Mouse cortex and Mouse cortex membrane enriched fraction stained with ARG11134 anti-ANK3 / Ankyrin G antibody at 1:1000 dilution.