

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

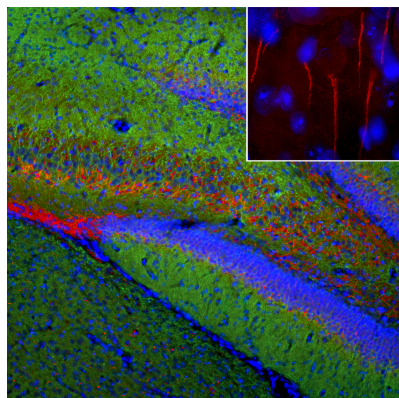
Application table	Application	Dilution
	ICC/IF	1:1000
	IHC-Fr	1:1000
	WB	1:500
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

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.

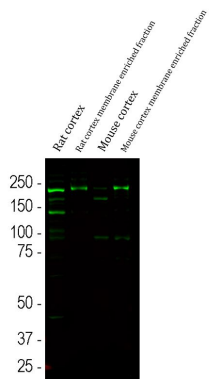
Gene Symbol	ANK3
Gene Full Name	ankyrin 3, node of Ranvier (ankyrin G)
Background	Ankyrins are a family of proteins that are believed to link the integral membrane proteins to the underlying spectrin-actin cytoskeleton and play key roles in activities such as cell motility, activation, proliferation, 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	<p>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).</p> <p>[Isoform 5]: May be part of a Golgi-specific membrane cytoskeleton in association with beta-spectrin. [UniProt]</p>
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.