

## ARG22241 anti-Ankyrin B antibody [S105-13]

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [S105-13] recognizes Ankyrin B
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, IHC-P, WB
Specificity	Detects ~200kDa. No cross reactivity against Ankyrin-G.
Host	Mouse
Clonality	Monoclonal
Clone	S105-13
Isotype	IgG1
Target Name	Ankyrin B
Species	Human
Immunogen	Synthetic peptide around aa. 203-496 of Human Ankyrin B
Conjugation	Un-conjugated
Alternate Names	Ankyrin-B; Non-erythroid ankyrin; ANK-2; Ankyrin-2; LQT4; brank-2; Brain ankyrin

### Application Instructions

Application table	Application	Dilution
	ICC/IF	1:200
	IHC-P	1:200
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.09% Sodium azide and 50% Glycerol
Preservative	0.09% 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

**Database links**

[GeneID: 109676 Mouse](#)

[GeneID: 287 Human](#)

[Swiss-port # Q01484 Human](#)

[Swiss-port # Q8C8R3 Mouse](#)

**Gene Symbol**

ANK2

**Gene Full Name**

ankyrin 2, neuronal

**Background**

This gene encodes a member of the ankyrin family of proteins that link the integral membrane proteins to the underlying spectrin-actin cytoskeleton. Ankyrins play key roles in activities such as cell motility, activation, proliferation, contact and the maintenance of specialized membrane domains. 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. The protein encoded by this gene is required for targeting and stability of Na/Ca exchanger 1 in cardiomyocytes. Mutations in this gene cause long QT syndrome 4 and cardiac arrhythmia syndrome. Multiple transcript variants encoding different isoforms have been described. [provided by RefSeq, Dec 2011]

**Function**

In skeletal muscle, required for proper localization of DMD and DCTN4 and for the formation and/or stability of a special subset of microtubules associated with costameres and neuromuscular junctions (By similarity). Attaches integral membrane proteins to cytoskeletal elements. Also binds to cytoskeletal proteins. Required for coordinate assembly of Na/Ca exchanger, Na/K ATPase and InsP3 receptor at sarcoplasmic reticulum sites in cardiomyocytes. Required for the coordinated expression of the Na/K ATPase, Na/Ca exchanger and beta-2-spectrin (SPTBN1) in the inner segment of rod photoreceptors. Required for expression and targeting of SPTBN1 in neonatal cardiomyocytes and for the regulation of neonatal cardiomyocyte contraction rate. [UniProt]

**Calculated Mw**

434 kDa

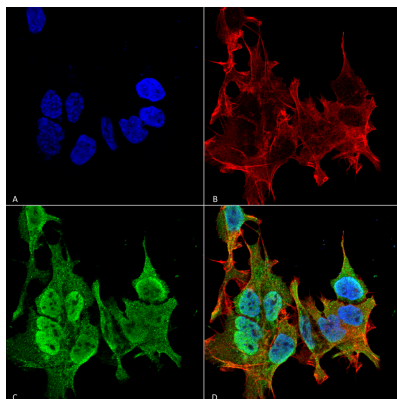
**PTM**

Phosphorylated at multiple sites by different protein kinases and each phosphorylation event regulates the protein's structure and function.

**Cellular Localization**

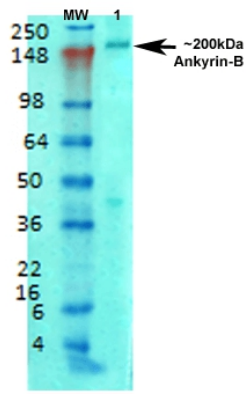
Cytoplasm, Apical cell membrane, Cell membrane, cytoskeleton, M line, myofibril, Sarcomere

## Images



ARG22241 anti-Ankyrin B antibody [S105-13] ICC/IF image

Immunofluorescence: Human Neuroblastoma cell line SK-N-BE. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: ARG22241 anti-Ankyrin B antibody [S105-13] at 1:100 for 60 min at RT. Secondary Antibody: Goat anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) ARG22241 anti-Ankyrin B antibody [S105-13] (D) Composite.



ARG22241 anti-Ankyrin B antibody [S105-13] WB image

Western blot: Rat brain membrane lysate stained with ARG22241 anti-Ankyrin B antibody [S105-13] at 1:1000 dilution.