

#### Ankyrin R Antibody

Ankyrin R Antibody, Clone S388A-10 Catalog # ASM10319

### Specification

# Ankyrin R Antibody - Product Information

Application Primary Accession Other Accession Host Isotype Reactivity Clonality **Description** Mouse Anti-Human Ankyrin R Monoclonal IgG2B

WB <u>P16157</u> <u>NP\_000028.3</u> Mouse IgG2B Human, Mouse, Rat Monoclonal

#### Target/Specificity

Detects ~200kDa. Does not cross-react with Ankyrin-B or Ankyrin-G.

#### **Other Names** Ankyrin-R Antibody, Ankyrin-1 Antibody, Erythrocyte Ankyrin Antibody, ANK-1 Antibody, ANK Antibody, rCG\_43073 Antibody

Immunogen Fusion protein amino acids 1-1881 (full-length) of human Ankyrin-R

**Purification** Protein G Purified

Storage Storage Buffer PBS pH7.4, 50% glycerol, 0.1% sodium azide -20ºC

Shipping Temperature Blue Ice or 4°C Certificate of Analysis A 1:100 dilution of SMC-487 was sufficient for detection of Ankyrin R in 20 µg of mouse brain lysate by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

Cellular Localization Cytoplasm | Cytoskeleton | Myofibril | Sarcomere | M line

# Ankyrin R Antibody - Protocols

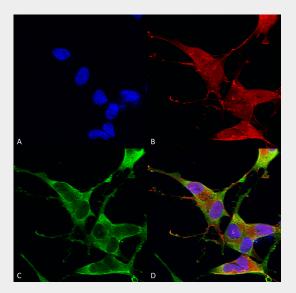
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry

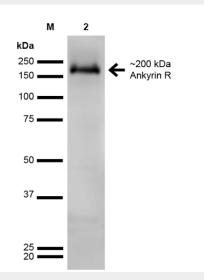


- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

#### Ankyrin R Antibody - Images



Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Ankyrin R Monoclonal Antibody, Clone N388A/10 (ASM10319). Tissue: Neuroblastoma cells (SH-SY5Y). Species: Human. Fixation: 4% PFA for 15 min. Primary Antibody: Mouse Anti-Ankyrin R Monoclonal Antibody (ASM10319) at 1:100 for overnight at 4°C with slow rocking. Secondary Antibody: AlexaFluor 488 at 1:1000 for 1 hour at RT. Counterstain: Phalloidin-iFluor 647 (red) F-Actin stain; Hoechst (blue) nuclear stain at 1:800, 1.6mM for 20 min at RT. (A) Hoechst (blue) nuclear stain. (B) Phalloidin-iFluor 647 (red) F-Actin stain. (C) Ankyrin R Antibody (D) Composite.



Western Blot analysis of Rat Brain showing detection of ~200 kDa Ankyrin-R protein using Mouse Anti-Ankyrin-R Monoclonal Antibody, Clone N388A/10 (ASM10319). Lane 1: MW Ladder. Lane 2: Rat Brain. Load: 20  $\mu$ g. Block: 2% GE Healthcare Blocker for 1 hour at RT. Primary Antibody: Mouse Anti-Ankyrin-R Monoclonal Antibody (ASM10319) at 1:1000 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Color Development: ECL solution for 6 min at RT. Predicted/Observed Size: ~200 kDa.



# Ankyrin R Antibody - Background

Ankyrins are a family of adaptor proteins that mediate the attachment of integral membrane proteins to the spectrin-actin based membrane skeleton (1). Ankyrins have binding sites for the beta subunit of spectrin and at least 12 families of integral membrane proteins. This linkage is required to maintain the integrity of the plasma membranes and to anchor specific ion channels, ion exchangers and ion transporters in the plasma membrane. Ankyrin R, or Ank1, was first discovered in erythrocyres, but has since also been located in the brain and muscles. Mutations are associated with hereditary spehrocytosis and alzheimer's diease (2).

## Ankyrin R Antibody - References

Bennett V., Baines A.J. (2001) Physiol. Rev. 81 (3): 1353–92.
Genes and mapped phenotypes. (n.d.). Retrieved April 21, 2015, from http://www.ncbi.nlm.nih.gov/gene/286