

**Anti-Alpha Actinin 4 Antibody**

**Our Anti-Alpha Actinin 4 primary antibody from PhosphoSolutions is mouse monoclonal. It detects huma**  
**Catalog # AN1302**

**Specification**

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**Anti-Alpha Actinin 4 Antibody - Product Information**

Application	<b>WB</b>
Primary Accession	<a href="#"><b>O43707</b></a>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG</b>
Calculated MW	<b>104854</b>

**Anti-Alpha Actinin 4 Antibody - Additional Information**

Gene ID **81**

**Other Names**

actinin 4 antibody, Actinin alpha 4 antibody, actinin4 antibody, ACTN 4 antibody, ACTN4 antibody, ACTN4\_HUMAN antibody, alpha Actinin 4 antibody, Alpha-actinin-4 antibody, DKFZp686K23158 antibody, F actin cross linking protein antibody, F-actin cross-linking protein antibody, Focal segmental glomerulosclerosis 1 antibody, FSGS 1 antibody, FSGS antibody, FSGS1 antibody, Non muscle alpha actinin 4 antibody, Non-muscle alpha-actinin 4 antibody

**Target/Specificity**

$\alpha$ -actinin-4 is a member of the actinin protein family comprised of an actin-binding domain in the N-terminus, 4 spectrin-like repeats in the central region, and 2 EF-hand motifs in the C-terminus (Honda et al, 1998).  $\alpha$ -actinin-4 and CLP36 form a complex in normal kidney podocytes. CLP36 is dependent on  $\alpha$ -actinin-4 for maintenance of its level in podocytes, whereas  $\alpha$ -actinin-4 is independent of CLP36.  $\alpha$ -actinin-4 is widely expressed in mammalian tissues and organs, while having a high occurrence of genetic mutations in kidney podocytes (Kos et al, 2003). FSGS, focal segmental glomerulosclerosis, is a rare genetic disease that attacks the kidney's filtering units (glomeruli) causing serious scarring which leads to permanent kidney damage and even failure. Three key mutations have been found in  $\alpha$ -actinin-4 in people diagnosed with FSGS. R310Q and Q348R, located in the spectrin-like repeats region, and K255E located in the actin-binding region. The R310Q and Q348R mutation significantly inhibits the ability of  $\alpha$ -actinin-4 to form the complex with CLP36. The K255E mutation was reversed where it increased the ability to bind CLP36 in the actin-binding region (Liu et al, 2011).

**Format**

Protein G purified

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

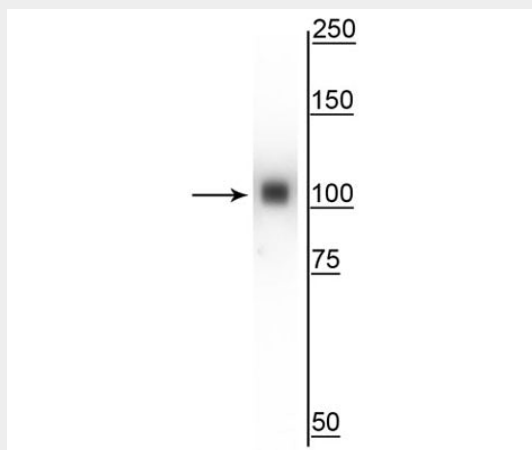
**Precautions**

Anti-Alpha Actinin 4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Shipping**  
Blue Ice**Anti-Alpha Actinin 4 Antibody - Protocols**

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Alpha Actinin 4 Antibody - Images**

Western blot of mouse whole brain lysate showing specific immunolabeling of the ~105 kDa  $\alpha$ -actinin 4 protein.

**Anti-Alpha Actinin 4 Antibody - Background**

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