

## **Product datasheet for TA336859**

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## Alpha Fodrin (SPTAN1) Rabbit Polyclonal Antibody

**Product data:** 

**Product Type:** Primary Antibodies

Applications: IF, WB

**Recommended Dilution:** WB: 1:5000-1:10000, IF: 1:500-1:1000

Reactivity: Human, Mouse

**Host:** Rabbit

Clonality: Polyclonal

**Immunogen:** Recombinant construct containing the 7th, 8th and 9th spectrin repeats of human Alpha

Fodrin (amino acids 676-1043). [UniProt# Q13813]

**Formulation:** Store at 4C short term. Aliquot and store at -20C long term. Avoid freeze-thaw cycles.

**Concentration:** lot specific

Purification: Whole antisera
Conjugation: Unconjugated

Storage: Store at -20°C as received.

Stability: Stable for 12 months from date of receipt.

**Predicted Protein Size:** 240 kDa

**Gene Name:** spectrin alpha, non-erythrocytic 1

Database Link: NP 001123910

Entrez Gene 20740 MouseEntrez Gene 6709 Human

Q13813



Background:

Alpha Fodrin (SPTAN1; also called non-erythroid alpha spectrin) belongs to spectrin family of proteins which are widely distributed filamentous proteins implicated in generating a supporting/organizing scaffold for cell membranes, and SPTAN1 protein is involved in processes such as secretion, interactions with calmodulin in Ca2+ dependent manner and Ca2+ dependent cytoskeletal movements at the membranes. SPTAN1 interacts with several proteins including ACP1, CALM, EMD, TRPC4 etc. and forms a component of a complex that contains several other proteins such as ACTN4, CASK, IQGAP1, MAGI2, NPHS1 and SPTBN1. SPTAN1 cleavage accompanies apoptosis, induced by activation via CD3/TCR complex, Fas/CD95 ligation and other Fas-expressing cells or through cellular exposure to staurosporine, dexamethasone, synthetic ceramide etc. Major products of SPTAN1 cleavage are N-terminal/C-terminal fragments, and phosphorylation of Tyr-1176 has been shown to decrease its sensitivity to cleavage by calpain in vitro. Defects in SPTAN1 have been linked to EIEE5 (epileptic encephalopathy early infantile type 5).

**Synonyms:** EIEE5; NEAS; SPTA2

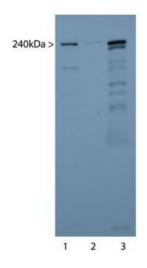
**Note:** This Alpha Fodrin antibody is useful for Immunocytochemistry/Immunofluorescence and

Western blot, where a band can be seen at approximately 240 kDa.

**Protein Families:** Druggable Genome

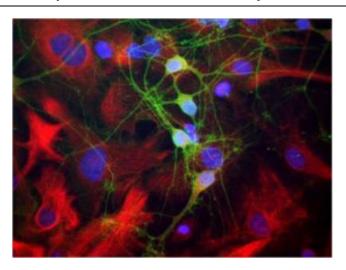
**Protein Pathways:** Tight junction

## **Product images:**



Western Blot: Alpha Fodrin Antibody TA336859 - Western blot of mouse sciatic nerve extract (lanes 1 and 2) and brain homogenate (3). A prominent band running at 240kDa represents the intact Alpha Fodrin heavy chain. More minor bands below this likely re





Immunocytochemistry/Immunofluorescence: Alpha Fodrin Antibody TA336859 - Mixed neuronglial cultures stained with rabbit antibody to Alpha Fodrin (TA336859, green) and mouse polyclonal antibody to Nestin (red). The Alpha Fodrin antibody stains numerous