BACKGROUND

Mutations in the ALS2 gene result in a number of juvenile recessive motor neuron diseases (MNDs), including juvenile primary lateral sclerosis (JPLS), a recessive form of amyotrophic lateral sclerosis (ALS2); infantile onset ascending hereditary spastic paralysis (IHSP); and a form of complicated hereditary spastic paraplegia (CHSP). The ALS2 gene encodes the Alsin protein. Alsin acts as a guanine nucleotide exchange factor for Rab5, a modulator of the endocytic pathway. Alsin is a cytosolic protein that is associated with small, punctate membrane structures. Therefore, Alsin may mediate membrane transport events, potentially linking endocytic processes and Actin cytoskeleton remodeling. The ALS2 C-terminal like protein (ALS2CL) also modulates Rab5 activity.

REFERENCES


CHROMOSOMAL LOCATION

Genetic locus: ALS2 (human) mapping to 2q33.1.

SOURCE

Alsin (2J10) is a mouse monoclonal antibody raised against recombinant Alsin protein of human origin.

PRODUCT

Each vial contains 100 µg IgG1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4°C. **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

Alsin (2J10) is recommended for detection of Alsin of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Alsin siRNA (h): sc-60158, Alsin shRNA Plasmid (h): sc-60158-SH and Alsin shRNA (h) Lentiviral Particles: sc-60158-V.

Molecular Weight of Alsin: 184 kDa.

Positive Controls: SH-SY5Y cell lysate: sc-3812, ACHN whole cell lysate: sc-364365 or human Alsin transfected 293T whole cell lysate.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:
1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.