**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 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, which 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: ALS2CL (human) mapping to 3p21.31.

**SOURCE**

ALS2CL (E-8) is a mouse monoclonal antibody raised against amino acids 765-840 mapping near the C-terminus of ALS2CL of human origin.

**PRODUCT**

Each vial contains 200 µg IgG2b kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. ALS2CL (E-8) is available conjugated to agarose (sc-377278 AC), 500 µg/ml agarose in 1 ml, for IP; to HRP (sc-377278 HRP), 200 µg/ml for WB, IHC(P) and ELISA; to either phycoerythrin (sc-377278 PE), fluorescein (sc-377278 FITC), Alexa Fluor® 488 (sc-377278 AF488), Alexa Fluor® 546 (sc-377278 AF546), Alexa Fluor® 594 (sc-377278 AF594) or Alexa Fluor® 647 (sc-377278 AF647), 200 µg/ml, for WB, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-377278 AF680) or Alexa Fluor® 790 (sc-377278 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

**APPLICATIONS**

ALS2CL (E-8) is recommended for detection of ALS2CL of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:300).

Suitable for use as control antibody for ALS2CL siRNA (h): sc-60156, ALS2CL shRNA Plasmid (h): sc-60156-SH and ALS2CL shRNA (h) Lentiviral Particles: sc-60156-V.

Molecular Weight of ALS2CL: 108 kDa.

Positive Controls: ALS2CL transfected 293T whole cell lysate.

**RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz MarkerTM 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). 3) Immunofluorescence: use m-IgG κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

**DATA**

**STORAGE**

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

**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.