

BRUNOL4 (S-15): sc-84714

BACKGROUND

Members of the CELF (CUG-BP1- and ETR-3-like factor) family are RNA-binding proteins implicated in the regulation of pre-mRNA alternative splicing. The CELF family includes six members. CELF4, also designated BRUNOL4, mediates exon inclusion and/or exclusion in pre-mRNAs that are subject to tissue-specific and developmentally regulated alternative splicing. Specifically, BRUNOL4 activates exon 5 inclusion of cardiac isoforms of Troponin T-C during heart remodeling at the juvenile to adult transition, and promotes exclusion of both the smooth muscle (SM) and non-muscle (NM) exons in actinin pre-mRNAs. BRUNOL4 contains three RRM (RNA recognition motif) domains and binds to muscle-specific splicing enhancer (MSE) intronic sites flanking the alternative exon 5 of Troponin T-C pre-mRNA. BRUNOL4 is strongly expressed in cerebellum, hippocampus, amygdala, temporal and frontal cortex and frontal lobes. Disruption of the gene encoding BRUNOL4 results in idiopathic epilepsy, a common human disorder that leads to severe seizures.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: CELF4 (human) mapping to 18q12.2; Celf4 (mouse) mapping to 18 A2.

SOURCE

BRUNOL4 (S-15) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping within an internal region of BRUNOL4 of human origin.

PRODUCT

Each vial contains 100 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-84714 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

BRUNOL4 (S-15) is recommended for detection of BRUNOL4 of mouse and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 1:30-1:3000); non cross-reactive with isoforms BRUNOL4-2, BRUNOL4-3 or BRUNOL4-5.

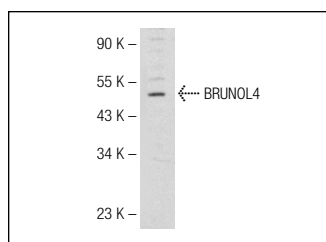
BRUNOL4 (S-15) is also recommended for detection of BRUNOL4 in additional species, including canine.

Suitable for use as control antibody for BRUNOL4 siRNA (h): sc-72666, BRUNOL4 siRNA (m): sc-141756, BRUNOL4 shRNA Plasmid (h): sc-72666-SH, BRUNOL4 shRNA Plasmid (m): sc-141756-SH, BRUNOL4 shRNA (h) Lentiviral Particles: sc-72666-V and BRUNOL4 shRNA (m) Lentiviral Particles: sc-141756-V.

Molecular Weight of BRUNOL4: 52 kDa.

Positive Controls: WI-38 whole cell lysate: sc-364260.

DATA



BRUNOL4 (S-15): sc-84714. Western blot analysis of BRUNOL4 expression in WI 38 whole cell lysate.

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 or our catalog for detailed protocols and support products.