

Dorfin (N-20): sc-55810

BACKGROUND

Dorfin (double ring-finger protein), also known as RNF19A or RNF19, is a multi-pass membrane, RING-IBR type, E3 ubiquitin-protein ligase. It is widely expressed with highest levels found in heart and ubiquitous expression throughout the central nervous system. Dorfin functions by accepting ubiquitin in the form of a thioester from UBCH7 and UBC8 and then transferring it to the targeted substrates. Dorfin is responsible for ubiquitylating synphilin-1, CaSR and mutant variants of SOD-1, a protein at fault for familial ALS (amyotrophic lateral sclerosis). Dorfin physically interacts with VCP (valosin-containing protein) via its C-terminus. Together these two proteins are associated with the formation of ubiquitylated inclusions (UBIs) that characterize many neurodegenerative disorders, such as Parkinson's disease and ALS. This association with UBIs suggests that Dorfin plays an important role in the disease process.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: RNF19A (human) mapping to 8q22.2; Rnf19 (mouse) mapping to 15 B3.1.

SOURCE

Dorfin (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Dorfin of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-55810 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Dorfin (N-20) is recommended for detection of Dorfin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Dorfin (N-20) is also recommended for detection of Dorfin in additional species, including porcine.

Suitable for use as control antibody for Dorfin siRNA (h): sc-62224, Dorfin siRNA (m): sc-62225, Dorfin shRNA Plasmid (h): sc-62224-SH, Dorfin shRNA Plasmid (m): sc-62225-SH, Dorfin shRNA (h) Lentiviral Particles: sc-62224-V and Dorfin shRNA (m) Lentiviral Particles: sc-62225-V.

Molecular Weight of Dorfin: 91 kDa.

Positive Controls: rat brain extract: sc-2392.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

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.