SANTA CRUZ BIOTECHNOLOGY, INC.

Filensin (R2D2): sc-69688

BACKGROUND

Filensin, also referred to as CP94, CP95, CP97, is an eye lens fiber, membrane-associated, cytoskeletal intermediate filament (IF) protein that is required for the assembly of beaded filaments, cytoskeletal networks that are necessary for the long-term maintenance of optical clarity. Phakinin copolymerizes with Filensin to make up the filamentous structures present in the beaded filaments. Filensin is also crucial for lens development since it regulates lens fiber cell shape conformation and lens transparency. Filensin contains a C-terminal non-α-helical domain that contributes in several ways to its function. The head domain of Filensin includes a di-arginine/aromatic amino acid motif that contains a potential protein kinase A phosphorylation site.

REFERENCES

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3. Gounari, F., Karagianni, N., Mincheva, A., Lichter, P., Georgatos, S.D. and Schirrmacher, V. 1997. The mouse Filensin gene: structure and evolutionary relation to other intermediate filament genes. FEBS Lett. 413: 371-378.
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5. Masaki, S., Kamachi, Y., Quinlan, R.A., Yonezawa, S. and Kondoh, H. 1998. Identification and functional analysis of the mouse lens Filensin gene promoter. Gene 214: 77-86.
6. Hess, J.F., Casselman, J.T., Kong, A.P. and Fitzgerald, P.G. 1998. Primary sequence, secondary structure, gene structure, and assembly properties suggests that the lens-specific cytoskeletal protein Filensin represents a novel class of intermediate filament protein. Exp. Eye Res. 66: 625-644.
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SOURCE

Filensin (R2D2) is a mouse monoclonal antibody raised against lens filament of bovine origin.

PRODUCT

Each vial contains 200 µg IgG_1 lambda light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Filensin (R2D2) is recommended for detection of Filensin of bovine origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of Filensin: 115 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGλ BP-HRP: sc-516132 or m-IgGλ BP-HRP (Cruz Marker): sc-516132-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) Immunofluorescence: use m-IgGλ BP-FITC: sc-516185 or m-IgGλ BP-PE: sc-516186 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

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.