

CFAP298 (B-1): sc-365792

BACKGROUND

The smallest of the human chromosomes, 21, makes up about 1.5% of the human genome. Chromosome 21 contains nearly 300 genes and 47 million base pairs. Down syndrome, also known as trisomy 21, is the disease most commonly associated with chromosome 21. Alzheimer's disease, Jervell and Lange-Nielsen syndrome and amyotrophic lateral sclerosis are also associated with chromosome 21. Translocations are found to occur between chromosome 21 and 8, and chromosome 21 and 12 in certain leukemias.

REFERENCES

1. Tesson, F., et al. 1996. Exclusion of KCNE1 (IsK) as a candidate gene for Jervell and Lange-Nielsen syndrome. *J. Mol. Cell. Cardiol.* 28: 2051-2055.
2. Tyson, J., et al. 1997. IsK and KvLQT1: mutation in either of the two subunits of the slow component of the delayed rectifier potassium channel can cause Jervell and Lange-Nielsen syndrome. *Hum. Mol. Genet.* 6: 2179-2185.
3. Müller, S., et al. 2000. Molecular cytogenetic dissection of human chromosomes 3 and 21 evolution. *Proc. Natl. Acad. Sci. USA* 97: 206-211.
4. Mao, R., et al. 2005. Primary and secondary transcriptional effects in the developing human Down syndrome brain and heart. *Genome Biol.* 6: R107.

CHROMOSOMAL LOCATION

Genetic locus: CFAP298 (human) mapping to 21q22.11; Cfp298 (mouse) mapping to 16 C3.3.

SOURCE

CFAP298 (B-1) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 149-177 within an internal region of CFAP298 of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

CFAP298 (B-1) is available conjugated to agarose (sc-365792 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365792 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365792 PE), fluorescein (sc-365792 FITC), Alexa Fluor® 488 (sc-365792 AF488), Alexa Fluor® 546 (sc-365792 AF546), Alexa Fluor® 594 (sc-365792 AF594) or Alexa Fluor® 647 (sc-365792 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-365792 AF680) or Alexa Fluor® 790 (sc-365792 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365792 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

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STORAGE

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

APPLICATIONS

CFAP298 (B-1) is recommended for detection of CFAP298 of mouse, rat and 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 1:30-1:3000).

CFAP298 (B-1) is also recommended for detection of CFAP298 in additional species, including bovine and porcine.

Suitable for use as control antibody for CFAP298 siRNA (h): sc-91375, CFAP298 siRNA (m): sc-108141, CFAP298 shRNA Plasmid (h): sc-91375-SH, CFAP298 shRNA Plasmid (m): sc-108141-SH, CFAP298 shRNA (h) Lentiviral Particles: sc-91375-V and CFAP298 shRNA (m) Lentiviral Particles: sc-108141-V.

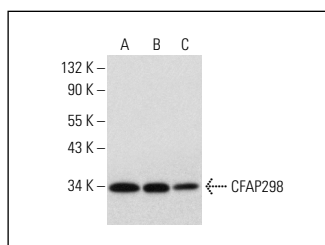
Molecular Weight of CFAP298: 33 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, K-562 whole cell lysate: sc-2203 or LNCaP cell lysate: sc-2231.

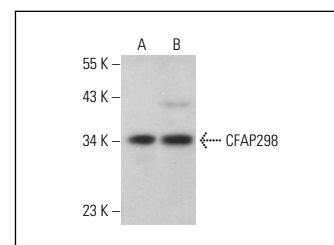
RECOMMENDED SUPPORT REAGENTS

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). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ 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



CFAP298 (B-1): sc-365792. Western blot analysis of CFAP298 expression in HeLa (A), K-562 (B) and LNCaP (C) whole cell lysates.



CFAP298 (B-1): sc-365792. Western blot analysis of CFAP298 expression in HeLa (A) and MDA-MB-231 (B) whole cell lysates.

SELECT PRODUCT CITATIONS

1. Cho, K.J., et al. 2018. ZMYND10 stabilizes intermediate chain proteins in the cytoplasmic pre-assembly of Dynein arms. *PLoS Genet.* 14: e1007316.

RESEARCH USE

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